

certainly change in undesirable directions. In addition, the market and cost structure would probably be substantially influenced.

A lead pellet that would disintegrate to a fine powder when exposed to water has also been proposed but, while alloys of lead and sodium, and possibly other elements will do this, they have other serious shortcomings.

The spherical-agglomeration technique can be used to make acceptable lead spheres, without the conventional shot tower, by agglomerating fine lead powder from its liquid suspension. A water-sensitive adhesive, such as dextrin or protein glue, can be used as a bridging or bonding agent. While this provides a strong structure when dry, the adhesive becomes a parting agent when the lead sphere is exposed to water or to a humid atmosphere over a period of time. Laboratory samples of shot have been prepared that have adjustable disintegration times when immersed in water. Acceptable densities in the finished product also appear to be within reach.

VACCINE PIONEER COMMEMORATED

A monument in memory of the Reverend John Clinch, a minister who was also a physician, was erected on June 1, 1968, in Trinity, Trinity Bay, Newfoundland where, in 1800, he administered the first smallpox inoculations in Canada.

Early in the summer of 1800, Dr. Clinch administered smallpox vaccine to his nephew - a boy in his teens - who was the only Trinity resident to volunteer for the test. The minister had obtained the vaccine from Dr. Edward Jenner, a friend in England, who had discovered it in 1796. After he was given the vaccine the boy was placed in the bed of a man dying of smallpox, and survived without contracting the disease.

The successful experiment won the confidence of the other inhabitants of Trinity, many of whom agreed to be inoculated. The vaccine's effectiveness was proved further when several inoculated residents were not affected after contact with a sailor who died of smallpox.

BIOGRAPHY

John Clinch was born in Cirencester, England, in 1749 and studied medicine with Edward Jenner in London. He went to Bonavista, Newfoundland, as a physician in 1775, and eight years later he moved to the fishing village of Trinity where he remained until his death in 1819.

He was ordained by the Bishop of London in 1787 as the parish priest and thus served in a double capacity in the Trinity community. He was also at various times the land surveyor, the judge of the surrogate court and the customs collector. In his spare time he was a philologist. He compiled a glossary of Beothuck Indian terms which, today, is one of three in existence. (The Beothucks, now extinct, were the first people seen by John Cabot during his 1497 voyage to Newfoundland. The last known Beothuck died in 1829.)

RACE FOR SAIL

HMCS *Oriole*, the training yacht of the Pacific Maritime Command of the Royal Canadian Navy, has been invited to enter a sailing race across the Pacific. The invitation came from the Royal Vancouver Yacht Club.

The race is being jointly sponsored by the Vancouver organization and the Lahaina Yacht Club of Hawaii. Some 15 to 20 sailboats from Canada and the U.S.A. will be taking part in the competition, the first of which was held in 1965 with four yachts. The race will begin in the area of the Victoria Inner Harbour on July 1, and is expected to end in Hawaii about July 20.

The *Oriole*, built in 1920, is 91 feet long, with a beam of 18 feet. She weighs about 100 tons and has sleeping accommodation for 21. The *Oriole* can spread 14,000 square feet of sail.

OPERATION WHOOPING CRANE

Ten eggs from the nests of whooping cranes in Wood Buffalo National Park, were picked up recently by biologists of the Canadian and United States Wildlife Services and flown by jet from Fort Smith, to the Rare and Endangered Wildlife Research Centre at Patuxent, Maryland. The object is to build up a captive propagating flock of whooping cranes and eventually release young birds to bolster the wild population.

The biologists cradled portable incubators on their laps during the 2,600-mile trip from Fort Smith to Patuxent, which took about seven hours, including refuelling stops at Winnipeg and Ottawa.

Of six eggs that were picked up last year, five hatched successfully. One hatched during the trip but the fledgling died.

All the nests from which eggs were picked up last year were re-occupied by the adults after the pick-up, and the same nests are occupied again this year.

YOUTH TRAVEL GRANTS

The first of a series of grants to be awarded in 1968 under the Youth Travel and Exchange Programmes was announced recently by Acting Secretary of State Gérard Pelletier. The grants, totalling \$476,100, will be made to 79 organizations whose travel and exchange projects have met the requirements of the Secretary of State Department's Programme for Voluntary Agencies. This programme, which was started by the Centennial Commission four years ago, offers Canadians the opportunity to gain a better knowledge and understanding of communities in other provinces than their own.

"Thanks to the tremendous effort and contributions of countless volunteer citizens, 15,000 young people will live a unique experience this year," Mr. Pelletier said. "It is hard to imagine a more effective way in which to promote goodwill and