Bionic kid

Two-year-old Clay Wesenberg is a Bionic kid.

The Bathurst, New Brunswick boy, who was born without a left forearm and hand, is the youngest child ever to be fitted with a myo-electronic arm at the Ontario Crippled Children's Centre.

William Sauter, who heads the centre's myo-electronic prothesis services section explained that in the past the little boy would have been fitted with an arm and harness "and a hook for a hand...and those kids became the black sheep in their school classroom – there was something wrong with them".

But little Clay, he pointed out, "will become a Little Steve Austin, a bionic kid...a syndrome created by the *Six-Million-Dollar Man* television series. We've found that children like Clay now become the envy, not the black sheep, because they've got a super hand".

Once a week, a child like Clay is fitted with some myo-electronic device by Mr. Sauter's department, the largest and oldest in North America. In fact, only a centre in Italy is larger, producing a prothesis a day.

Getting a small hand

The first problem was getting "a hand as well as an electronic system small enough for the child", Mr. Sauter said. By coincidence, a system was chosen that was devised by the University of New Brunswick. It is one of several systems used by the centre.

Clay, he added, had been outfitted with a conventional artificial arm when he was nine months old, so "he could get his sitting balance, but also to satisfy his parents. There's an emotional need as well as a physical need...and quite often the emotional need is more important because the child is socially dependent on his parents".

Mr. Sauter explained that Clay's new arm is self-supporting, fitting around the elbow, clipping on to the bony prominence.

Inside the arm's socket is a set of electrodes that pick up body signals sent out at a rate of a millionth of a volt. These signals go to an electronic circuit where they're amplified 50,000 times and fed into a logic circuit that controls the opening and closing of the hand.

The myo-electronic staff had previously selected a muscle that controls only the grasp action and is isolated from other muscles that control reaching or lifting arm actions.

"It's an effort at first for the child," said Mr. Sauter. "It's like learning to drive a car. You make some mistakes, but in two or three years it becomes very subconscious. It's (a)...learning experience at first and very fatiguing."

Mr. Sauter said Clay had learned "how to tell his muscles what to do. He's reached a level of competence now so he can go home".

Learning to tell that muscle what to do was fun for Clay, his mother said.

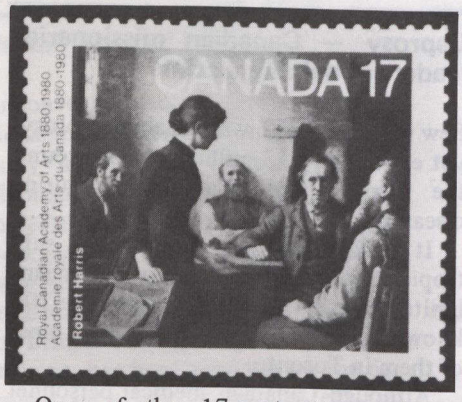
"He's too young to understand what he was doing. But by playing with an electric train, starting and stopping it, and then racing cars, he learned how to open and close his hand."

Stamps commemorate Canadian art

Canada Post will issue two 17-cent and two 35-cent postage stamps in a special ceremony on March 6, 1980 as a tribute to the centenary of the Royal Canadian Academy of Arts and the National Gallery. All four stamps will portray works by Academy members whose creations form part of the National Gallery collection.

Three areas of artistic expression will be represented: painting, architecture, and sculpture.

One of the 35-cent stamps features a reproduction of Lucius O'Brien's painting *Sunrise on the Saguenay,* one of the first paintings acquired by the Gallery in 1880. The second 35-cent stamp carries a reproduction of Thomas Fuller's pen-and-watercolour design for the original Parliament Buildings, first occupied in 1865 and destroyed by fire in 1916. Fuller was made Chief Architect of the Public Works Department in 1881.



One of the 17-cent stamps shows Robert Harris' painting, *A Meeting of the School Trustees,* purchased by the National Gallery in 1886 and often regarded as the "first work with a feminist theme in Canadian art". The sculpture featured on the other 17-cent stamp, entitled *Inspiration,* is the work of sculptor Louis-Philippe Hébert. The bronze sculpture was deposited with the National Gallery in 1906.

Canadians win medals at Disabled Winter Olympics

Canadian athletes finished the Winter Olympics for the Disabled recently in Geilo, Norway, with six medals – two golds, three silver and one bronze.

In alpine skiing, Lorna Manzer of Calgary won the slalom for women with a below-the-knee amputation. Manzer, a qualified ski instructor, sped down the 39-gate course in 44.71 seconds to give her a two-run total of 1:28.59.

Lana Spreeman of Olds, Alberta, won the gold medal in another slalom race, with Manzer taking the silver.

In men's skiing, Jim Cullen, 20, of Sudbury, Ontario, captured the silver medal for full-leg amputees skiing on a single ski. Cullen's combined time for the 43-gate course was 1:43.22.

Winnipeg's Greg Oswald was the silver medalist in the men's giant slalom for one-legged amputees with an aggregate time of 2:33.79.

In the 20-kilometre relay for blind and partially blind cross-country skiers, Canada's women's foursome placed third in a time of 2 hours 22 minutes and 3 seconds.

Canada's only cross-country medal of the games was won by Janet Schuster of Edmonton, Judy Shaw of Toronto, Mary Brunner of Vancouver and Dawn Coyle of Mississauga, Ontario.