Warm Springs artisans fought polio's damage M.A.J. MCKENNA 1504 words 12 April 2005 A1 Copyright (c) 2005 The Atlanta Journal-Constitution, All Rights Reserved

Warm Springs --- Fresh metal shavings glint beneath a drill press, and the handles on the tools lined up at the anvils gleam with the friction of long use.

Yet the brace shop at the Roosevelt Warm Springs Institute for Rehabilitation has a deserted air. Some of the machines are covered, and the covers are dusty. Others have been shoved unwanted against the cinder-block walls.

Once, more than a dozen men and women worked here, building devices that let people crippled by polio leave institutions and live in the world again. Now there is one worker, one foreman and one veteran who trained them both and will retire soon.

"No one else does this like we did it," said Ellis Florence Jr., 47, the veteran who followed his father into the brace shop 28 years ago. "This is a lost art now."

But the brace-makers of Warm Springs --- most of them retired, a few still on the job -- are content. They spent their skills to repair the ravages of polio. Their craft is no longer needed because the disease they devoted their lives to fighting may be coming to an end at last.

'The vaccine works'

The long effort to end polio began 50 years ago today with two sentences uttered in Ann Arbor, Mich.

The speaker was Dr. Thomas Francis Jr., longtime mentor to the young virologist Dr. Jonas Salk. Salk had developed a potential vaccine against polio, and Francis was charged with testing it. In the previous year, he had arranged for 1.8 million children in 44 states to receive either the vaccine or a placebo.

The stakes were impossibly high: Polio was one of the most feared diseases in America. Every summer it ripped across the country, leaving tens of thousands of children feverish and paralyzed. It attacked randomly --- it could take one child in a family and leave siblings untouched --- and it sowed terror. Fear of contagion would empty theaters, playgrounds and swimming pools --- anywhere children gathered --- whenever a new case was found.

On April 12, 1955, Francis strode to the front of a murmuring crowd of hundreds packed into the University of Michigan's largest auditorium.

"The vaccine works," he said. "It is safe, effective and potent."

The announcement was electric. Journalists stampeded for copies of the thick report and ran for phones. Bulletins broke into radio and TV broadcasts. As the news spread across the country, church bells and fire sirens started to ring. Within days, injections began nationwide. Long before 1955, Warm Springs knew polio. The central Georgia town and spa, built around a natural source of buoyant, mineral-laden water, had been focused on the disease since Franklin Delano Roosevelt bought property there in 1927.

Roosevelt was the country's best-known polio victim. He lost the use of his legs at age 39, in 1921. Three years later, he was lured to Warm Springs by the tale of a young man who regained his strength in the spring-fed pool.

He was captivated, and spent \$200,000 to buy the pools, the inn and the surrounding forest. He created a community where polio victims' impairments were acknowledged instead of shunned --- and where he allowed himself to be seen as disabled, a sharp contrast to the hardy appearance he maintained in the outside world.

Some of the brace-makers remember him. Marion Dunn of Pine Mountain, a widower of 82, was a "push boy" in 1938: He hauled wheelchair-bound patients across the property and hefted them onto the pools' submerged therapy tables. Roosevelt, one of his charges, playfully dunked him, he recalled.

After World War II, Dunn became a brace-maker, forging components in front of a gas furnace in a stifling cellar, polishing metal on a spinning belt that could take a finger off and cutting heavy cowhides to make sturdy shoes. From tracing to final fitting, he could make a brace in a day. He worked for 37 years.

Last week, on a visit to the shop, Dunn picked up a thigh-high brace left out on display. He ran his thickened fingers over the mirror-bright uprights, stopping at a smooth carved curve.

"That's my mark," he said. "All the ones I made, I finished that way."

Ending the shame

Warm Springs' patients came from all over the United States, drawn by treatment paid for by the National Foundation for Infantile Paralysis --- later the March of Dimes.

At Warm Springs, patients were pushed to be as independent as possible. Before Roosevelt's advocacy, polio had been regarded by many as shameful. Warm Springs sent patients to school, taught them to play sports and encouraged them to excel.

The brace shop was a vital part of the effort: It held the promise of allowing them to walk again.

"The doctor would call us in and tell us what he wanted the patient to do," Dunn said.
"And then it was up to us to figure out how to do it."

They taught each other. Dunn trained Florence's father, who trained Bill Crowder of Durand. The elder Florence died in 1976, and Dunn and Crowder trained his son. Ellis Jr. trained Tim Butler, the shop foreman --- who came to Warm Springs as a car accident victim and wears a prosthetic left foot --- and Mark Lee, who is chief brace-maker now.

"We were all mechanically inclined, and I guess that's why we did well here," said Crowder, who came to Warm Springs in 1955, retired in 1994 and then returned to work part time. "I loved what I was doing, every day."

Still a threat elsewhere

The Salk vaccine --- and the rival "sugar cube" vaccine developed in 1961 by Albert Sabin --- had dramatic effects. In 1955, there were 28,985 polio cases in the United States. Ten years later, there were 72 cases. Ten years after that, in 1975, there were eight. The last naturally occurring U.S. case of polio was in 1979.

But polio persisted in the world, and in 1988 the World Health Organization, the Centers for Disease Control and Prevention, and Rotary International vowed to eradicate the disease. At the time, there were about 350,000 cases of polio worldwide. Last year, according to the WHO, there were 1,263 cases.

There have been setbacks. The disease lingers in 20 countries and the WHO has pushed back the hoped-for eradication date to this year or beyond.

In the United States, there are 1.6 million polio survivors. Some wear braces, and many who were treated at Warm Springs insist on returning for fittings. Others with late-in-life post-polio syndrome need braces and crutches for the first time.

Warm Springs is now a center for post-polio treatment and treats spinal-cord injury patients. There is enough work to keep Lee and Butler busy, and to lead Ellis Jr. to think of staying part time. But they can imagine a day when there will be no more polio, and no polio patients to care for.

"We saw them from the time they were little children. We built them new braces when they grew," Dunn said. "If a patient could take a pair of braces I made, and walk --- even if it was just a few steps --- that made me feel real good."