

While devoting his life to repairing accident victims' scars, plastic surgeon Claire Straith also influenced the auto industry to design less dangerous cars

Zone





By Maria Kovac

e fixed faces, not just on cosmetic whims, but faces horribly mangled by hard, brutal contact with cold metal and sharp objects. Though he removed as many marks as he could manage, the work led him to leave a lasting mark of his own, on the way cars are made.

But Claire Straith was no auto designer.

His place in automotive history was rooted in late-night phone calls alerting him that another auto accident victim had been brought into the emergency room at Harper Hospital. As chief of plastic surgery, he was on call to come in and help repair the damage. It happened a lot.

It happened enough that after addressing a victim's immediate needs in the operating room, Straith began taking a camera to the crash site to photograph the wreckage. He looked for clues to what specifically caused the patient's injuries. He focused his attention, and his camera, on the metal dashboards and protruding control knobs on cars of the day.

It was 1920s and '30s, a period when plastic surgery was blossoming as a medical specialty, automobiles were rolling off the assembly lines at a record pace, and severe car accident injuries were becoming distressingly common.

The numbers became so great and the injuries so horrifying that Straith soon found himself on a mission, not just to repair injuries but to prevent them — or at least minimize the damage. It was a mission that took the surgeon into the offices of some of the auto industry's most powerful executives, all in the hope of convincing them that some things had to change.

Born in Harrow, Ontario, in 1891, Straith was the son of a dentist

who moved the family to Detroit around 1903. After graduating from Central High School, Straith studied at the University of Michigan, then received his medical degree at Chicago's Rush Medical College, and his dental degree from the Chicago School of Dentistry in 1918.

Around this time, he traveled to France to work with surgeons who were experimenting with the new techniques of plastic surgery on soldiers who'd been disfigured in World War I. He brought his knowledge of the developing specialty back to Detroit in 1920.

Straith went to work at his father's office in the David Whitney Building downtown. While his father and two others practiced dentistry there, Straith specialized in nose, throat, oral and plastic surgery. Eventually, he also worked out of Harper and other Detroit

Opposite: Dr. Claire Straith, left, and his assistant operate on a patient. Above: Straith pressured car companies to add padded dashboards, as in this 1930s-era car.

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"It was doctors who were the principal advocates for improved design for auto safety, improving design to minimize injuries in what they realized were inevitable accidents."

— JOEL EASTMAN, HISTORY PROFESSOR



An innovator from the beginning, Straith worked to develop new techniques and instruments in plastic surgery and became a pioneer in the specialty. But his passion was his personal campaign for improved safety in auto design.

In a speech made at the American Medical Association conference in 1937, Straith said, "What I consider one of the most pertinent problems of present-day medicine [is] the proper care and management of the ever-growing numbers of victims of motor car accidents. The ability of the engineer to design, and of the industrialist to make easily available, ever-speedier motor vehicles far surpasses the intellectual ability of the average man to utilize them safely."

Not having much hope for changing driving habits, Straith concentrated on the design factors that were continually contributing to the injuries. Some of the major culprits were the sharp angles of the metal dashboards, the raised knobs and gauges on the dash and protruding door handles.

In the early '30s, Straith began installing seat belts and padding the dashboards and instrument panels in his own cars. He designed three types of crash panels, which he patented in 1935 and 1937. And the surgeon may have been one of the first people to recognize the front passenger seat as the most dangerous in a vehicle, referring to it as the "death seat."

In 1934, Straith began holding conferences with automakers to present his case studies. The presentations included slides of disfigured victims and Straith's ideas on design improvements.

But it was in 1935 that Straith found his first significant ally — Wal-



ter P. Chrysler. After his meeting with the head of the Chrysler Corporation, a Chrysler engineer was assigned to work with Straith on incorporating his ideas. As a result, the 1937 Dodge was introduced with such firsttime safety features as instrument panel buttons that were flush with the dashboard when not in use, a dashboard that was shortened from the bottom to help prevent knee injuries and padded front seat backs to cushion any impact sustained by backseat passengers.

Joel Eastman, a history professor at the University of Southern Maine in Portland, is the author of the 1984 book *Styling vs. Safety*. It includes a section on Straith and is dedicated to the surgeon. Eastman says Straith was 30 years ahead of his time.

"For one person not only to realize the problem, propose solutions to the problem, and then get those solutions implemented by the biggest industries in the world, was nothing short of remarkable," says Eastman.

Following the debut of the '37 Dodge, other manufacturers began incorporating similar safety-driven designs in their models.

"If you look at the dashboards of the cars in the late '30s, they're very smooth, no sharp projections, most of the knobs are recessed, and that was because of Claire Straith," Eastman says.

Straith continued his campaign throughout the '40s, and when the Tucker Corporation formed in 1946, Straith forged a promising alliance with Preston Tucker, an auto visionary who was extremely concerned with safety issues. Tucker and his designers were so affected by Straith's testimonies on disfiguring injuries that they redesigned the interior of their 1948 debut model (in the end, their only model).

Hazardous car designs, particularly on the dashboard, coupled with a lack of seat belts, resulted in horrible injuries and disfigurements.

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They even considered installing seat belts until surveys revealed that the public would find them of little interest, or somehow meant the cars were unsafe.

It was this concept that safety not only wouldn't sell but might deter the buying public that prevailed during the 1950s. Designers became more concerned with creating the most appealing models, and viewed safety measures in design as a competitive disadvantage.

"Some of the dashboards produced in the late '50s and early '60s were just horrible," Eastman says. "They were dangerous. They were much worse than the dashboards that had been produced in the late '30s. So there was ground lost."

But that didn't deter Straith. His daughter, Jean Straith Henderson, says the surgeon solicited the help of family members and friends to help him construct homemade dashboard pads that could be attached to the interior of any vehicle. He would sell them, give them away, supply them to anyone who showed interest in using them.

"As a doctor, I'm sure he felt he had a responsibility to make this

information available and make suggestions to try to change things," Eastman says. "It was doctors who were the principal advocates for improved design for auto safety, improving design to minimize injuries in what they realized were inevitable accidents."

Henderson sees her father's work as an extension of his compassionate personality.

"He was a very concerned person," she says. "He was a very committed Christian and, as such, he wanted to help. But more than that, he was just always interested in peo-

ple. Patients admired him so, and it's because he empathized with them. He was so kindly and concerned about their welfare."

Straith's granddaughter, Janet Straith Husband, agrees.

"He worried about car accident victims," she says, "but also worried about the psyche of these people — repairing their scars and broken noses and making people feel better about themselves in general."

Straith was a pre-eminent plastic surgeon and auto-safety advocate until his death from a heart attack in 1958, at age 66. Federal regulations made front seat belts standard features in automobiles six years after his death, and rear seat belts two years after that. Today his legacy lives on in many ways. In 1952, he built the Straith Hospital on Grand Boulevard in Detroit as a tribute to his father; it now is called the Straith Hospital for Special Surgery and is located in Southfield. The Straith Clinic in Bingham Farms carries on the plastic surgery care he pioneered during the first half of the century.

But arguably his greatest legacy are the safety measures he helped influence throughout the early evolution of auto design. His work even gained the attention of the producers of the PBS series NOVA. Straith's story was included in the special *Escape: Because Accidents Happen*, which aired last February.

More than 40 years after Straith's death, seat belt use is mandatory in most states. Most new automobiles are equipped with dual front airbags. And the catalyst was a plastic surgeon who cared enough about patients to care about the cars they drove.

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Straith and son Richard ready to break ground on the Straith Hospital. Straith's granddaughter, Grace Jeffries, leans on a safer and softer dashboard in his late-1940s auto.

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