

CHAPTER TWO



Innovation

"We were a green crew and we knew it."

- Dr. Will Mayo

THE HOSPITAL MUST BE THE BEST AND THE MOST MODERN that means allowed." With these words Dr. W.W. Mayo set his personal standard for building Saint Marys Hospital. To that end he took his older son, Dr. Will, on a tour of Eastern hospitals to study floor plans, lighting arrangements and administrative organization. His younger son, Dr. Charlie, visited hospitals in Europe where he observed new developments in surgical procedures and practice. In consultation with the Sisters, the Mayos pooled their findings and gave the architect instructions "once and twice and thrice" until they got exactly what they wanted.

The Mayo brothers avidly sought innovative ideas and methods. They reserved application, however, to those changes that furthered their primary purpose. Dr. Will put it succinctly: "To get the patient well with as little loss of time as possible: whatever contributes to this end is adopted; whatever does not is eliminated."

The hobo described the elevator he saw in Paris.

In the early years, Dr. Charlie used his mechanical skills to solve hospital problems ... albeit with varying degrees of success. The hospital had no paging system. Dr. Charlie and a neighbor boy installed an electric announcing system. As the story goes, these amateur electricians got some wires crossed. "The bells would

> start ringing and would not stop." The Sisters carried shears with them as a precaution. If a bell kept on ringing, swish! went the wires. The next morning Dr. Charlie would have to resurrect the whole system again.

> The hospital desperately needed an elevator. Good fortune brought an unlikely helper to the door. The Sisters always offered hobos a good meal. One day, a well-traveled hobo described a hydraulic elevator he had seen in Paris. Hearing this, Dr. Charlie and a local machinist dug a 40-foot hole and lowered several sections of pipe into it. When water from the basement reservoir rushed into the pipe, it pushed the elevator upward like a giant syringe.

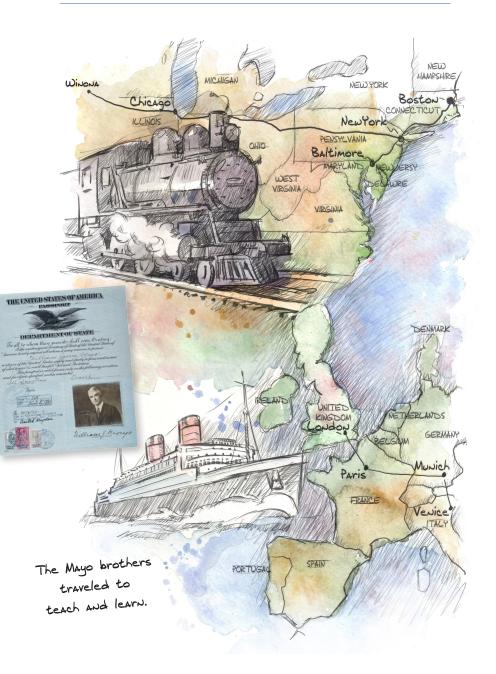
The Mayo brothers kept looking for new ways to improve medicine.

Saint Marys Hospital opened as a new era of surgery began. Infection was a surgeon's greatest nemesis and the reason for the public's fear of hospitals. Even after successful surgical procedures, septic infections invaded

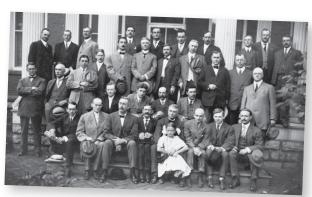


the patient's wounds, causing high fever and, many times, death. In 1867, Scottish surgeon Joseph Lister demonstrated that bacterial microorganisms caused surgical infection and that antisepsis could kill them. Wherever surgeons practiced antisepsis, operations increased in volume and scope. The Mayos incorporated antisepsis in their surgery with astonishing results: of the 1,037 patients admitted in the first two years, the number of deaths was 22, as low as at any time in the hospital's history. Patients went home cured and, in turn, told others about their experience. Such a low mortality rate, which brought recognition for the abilities of the Doctors Mayo, also brought increasing numbers of patients to Saint Marys Hospital.

Fired with ambition to create a surgical center on a level with Eastern hospitals, the Mayos kept abreast of new developments. In Dr. Will's words, "We were a green crew and we knew it." Yet, it was their consuming



Dr. Will and his Dr. WIII AND his daughter, Phoebe, photographed with a group of surgeons visiting Rochester.



desire to overcome inadequacy that helped build the Mayo team of surgeons. One at a time, over several years, they made extended visits to leading surgical centers in Baltimore, Boston, Philadelphia and Chicago to observe the work of selected surgeons. The Mayos were determined to bring back from every trip some specific improvement that could be applied in Rochester, even if it was only a new kind of soap or antiseptic. When one of them returned from a trip, Sister Joseph Dempsey, the superintendent of Saint Marys, would remark, "Now I wonder what new things we will need to do." The Sisters were as committed to improving in their areas of practice as the Mayos were in surgery.

Working in their remote location, far from urban centers and nearby competitors, the Mayos performed some operations by the hundreds, and even by the thousands. Indeed, by 1906 the Mayo surgeons had performed 4,770 operations, more than any hospital in the United States.



Visiting surgeons wore these ribbons when they observed procedures in the operating room.

As the Mayo brothers acquired prominence, large numbers of surgeons, both national and international, came to Rochester. They were fascinated that two unheralded surgeons, native sons of the Midwest, should have developed a center of surgery in an outof-the-way village. The large number of surgeries daily in many fields permitted demonstration of all the newer surgical procedures in the course of a few days. Visitors could not only witness the technical skills of the Mayos, but they could hear them discuss surgical problems in their operating rooms. Their simple, informal remarks reflected the personalities of the Mayos themselves who were frank, unassuming and honest men.

Endnotes

- Page 12: A firsthand account of the hobo who described an elevator he saw in Paris is covered in a dictated note entitled "Elevator" from Sister Sylvester Burke to Sister Mary Brigh Cassidy, *Saint Marys Hospital Archives*.
- Page 15: The Sisters' and the Mayos' dedication to improvement is described in Whelan, E: The Sisters' Story: Saint Marys Hospital – Mayo Clinic. Rochester, Minnesota: Mayo Foundation for Medical Education and Research. Volume One, Second Edition, 2016; p. 81.
- Page 15: Early statistics can be found in the Annals of Saint Marys Hospital.



CHECK YOUR COMPASS

Innovation

Infuse and energize the organization, enhancing the lives of those we serve, through the creative ideas and unique talents of each employee.