

Who was Schoemaker?

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Surgical procedures to treat testicular maldescent in pediatrics have undergone many innovations over the last two centuries since anatomist John Hunter, in the 18th century, suggested the first theories about testicular descent mechanisms and cryptorchidism disorders. Various eponyms to name many of the procedures used can be found in the literature – Bianchi and Fowler-Stephens are two of the most widely used ones today. Before, these was the technique of Bidwell or Bevan, and more recently, that of Ombredanne. But perhaps the most classic and widely used surgical technique for testicular descent is Schoemaker Orchidopexy.

Jan Schoemaker (1871-1940) was a Dutch surgeon born in Almelo (The Netherlands) on August 15, 1871. He married Jacomiena Plonia at the age of 27. One of his children as a result of this marriage, Carel Albert (1902-1990), was also a surgeon in The Hague.

Schoemaker studied medicine in the Dutch city of Leiden, home of the oldest university in The Netherlands. He completed his studies in Switzerland (Zurich and Bern) and Germany (Heidelberg), graduating on November 22, 1895. The following year, he defended his doctoral thesis “Experimental Contribution to the Knowledge of Intestinal Suture.”

After completing his university studies, he worked for two years as a surgical assistant at the historic St. Elizabeth Gasthuis Hospital Complex in Haarlem, founded in 1581, under the tutelage of Benjamin Jan Kouwer (1861-1933)⁽¹⁾. He subsequently worked at the Wilhelmina Hospital in Nijmegen for four years. On February 11, 1902, he started working at the Zuidwal Hospital in The Hague, where he would remain for the rest of his professional life.



Figure 1.
J. Schoemaker.
1935.

His academic merits include honorary membership in the American College of Surgeons since 1921, and honorary membership in the North American Medical Association and the British Orthopedic Society. He was awarded the medal of King Albert of Belgium. The latter recognition likely had to do with the fact Schoemaker was one of the surgeons who operated, unsuccessfully in the end, on Antoine Depage (1862-1925), one of the most renowned Belgian surgeons of his time and professor at the University of Brussels. Depage, a great friend of the Belgian royal family, especially Queen Elizabeth Gabriela of Belgium, required an intestinal resection due to the sequelae of a previous surgery to manage Ogilvie’s syndrome⁽⁷⁾.

He showed great interest in stomach surgery and physiology, specifically gastric perforation, but he also published on such disparate areas as pelvic surgery and orthopedics.

He designed a few surgical instruments, such as the Schoemaker Thread Scissors and the Schoemaker Coastal Scissors (1905), as well as an intestinal clamp. He described a technique for anal sphincter reconstruction

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Figure 2. Doctor Schoemaker in the center of the picture, surrounded by American fellows and nurses. A history of surgery: with emphasis on the Netherlands. 1988. p. 332.

(1909), the Schoemaker Position, and a modification of the Billroth I Technique. In addition, anatomically speaking, the Schoemaker or spinotrochanteric line is an imaginary line between the tip of the greater trochanter and the anterior superior iliac spine, used in hip pathology.

In the press of the time, he was portrayed as a brilliant surgeon – systematic, self-taught, and elegant. To him is attributed the expression “I pencil with the knife”⁽¹⁾. Many surgeons came to The Hague from other European countries and even the United States to see him operate, especially in his role as a stomach surgeon, and particularly when he performed the Billroth I gastric resection. He introduced an innovation to this technique, removing the entire lesser curvature⁽⁶⁾. This is why mortality, which was approximately 25% in these procedures, did not exceed 5.5% in Schoemaker’s patient cohort. He was also one of the few Dutch surgeons who managed to publish in German and American journals just before World War II.

But let’s focus on the treatment of testicular maldescent. It was not until 1931 that Jan Schoemaker published, at the age of 61 – at the height of his professional maturity –, an article entitled “On Cryptorchidism and its Treatment” in the *Der Chirurg* journal. Schoemaker published an orchidopexy technique inspired by the operations conducted by his former boss, Benjamin Jan Kouwer, who performed the so-called operation popularized by Eugene Hahn in the 1890s. The testicle was mobilized and removed through a scrotal opening, narrow enough not to retract back into the scrotum. After 24 hours, the scrotal skin was mobilized and closed over the testicle. Schoemaker found the deferred closure of the skin on the following day to be painful and unpleasant for children, so he developed the one-step procedure as it is performed today⁽⁸⁾.

This way of fixing the testicle in a pocket created above the dartos was first described by him and subsequently popularized by American John K. Lattimer from Columbia University in 1957⁽⁴⁾.

Like other surgeons from the early 20th century, Schoemaker took X-rays of his patients himself. Beginning in 1906, when he was 35 years old, he began to suffer from persistent dermatitis on his left hand, which was attributed to the use of those primitive X-ray machines. That skin condition worsened over the following decades, and finally, two fingers of that hand had to be amputated. Still, the developed metastases could not be treated and were the cause of his death on September 20, 1940, in the middle of World War II, in The Hague.

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