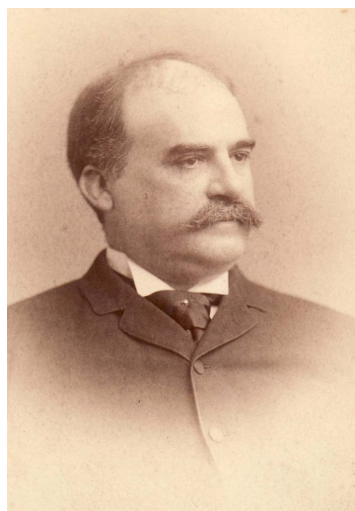


Sterilised gauze and baby powder: Robert Wood Johnson I and Frederick Barnett Kilmer



Robert Wood Johnson I, one of the three brothers who founded Johnson & Johnson

The humble gauze dressing may nowadays be considered more of a burden than a blessing when non-adherence and optimal healing are concerned, but at its inception it was a revolutionary advance over lint fibres hand-scraped by teams of women (Bishop, 1959).

It so happens that during the late 19th century, two men either side of the Atlantic Ocean were busy developing sterile gauze dressings for wound care and ultimately both developed products with patient comfort in mind.

As covered in a previous edition of this column, Birmingham surgeon Sampson Gamgee (1828–1886) was responsible for the development of Gamgee Tissue (White, 2014), a sterile sandwich of cotton wool covered by bleached, absorbent gauze. Gamgee advocated for a dry dressing approach, in vogue at the time and announced his product in the *Lancet* in 1880 (Gamgee, 1880). Gamgee had patient wellbeing in mind and the Gamgee Tissue dressings were prized for their soft and conformable nature.

It was around this same time that, across the Atlantic, New Jersey industrialist Robert Wood Johnson I (1845–1910) was becoming increasingly interested in Sir Joseph Lister's work into sterile surgery. Despite his industrial background, Johnson attended a speech given by Lister in 1876 and with his interest suitably piqued, he and his business partner began trying their hand at producing products for use in the operating theatres. Success, however, was dependent upon a crucial development that was not to occur until after an enforced period of exile.

One of three brothers, Robert Wood Johnson was outcast from the formation and initial running of a partnership started by his two siblings — an entity founded in 1886 which went by the name of Johnson and Johnson. Shortly after, Robert Wood was allowed to reconvene with his brothers and his heroic work ethic and management abilities paved the way for what has become one of the foremost medical corporations in the world today, the venerable 'JnJ'.

From an old wallpaper factory in the late 1880s, the Johnson brothers began producing individually wrapped antiseptic dressings for surgical application (Ingham, 1983).

Arguably, the crucial factor which paved the way for J&J's success was the employment of Dr Frederick Barnett Kilmer, an erstwhile pharmacist who held the post of Director of Scientific Affairs at J&J from 1889 to 1934. Kilmer set up a medical research laboratory and was responsible for numerous innovations in sterilised wound dressings.

Incidentally, it was the shrewd observation of Kilmer which led to the invention of Johnson's Baby Powder. Kilmer noticed that the medicated plasters which the company were making at the time could cause skin irritation during removal (J&J Archive). In an inspired moment, Kilmer recommended sending customers a tin of Italian talc. Customer correspondence from new mothers described the soothing effect of the talc, and Johnson's Baby Powder was thus born.

Kilmer was clearly a beneficent soul and he sought to spread knowledge of how to treat wounds by antiseptic methods. According to the J&J archive, his booklet entitled *Modern Methods of Antiseptic Wound Treatment* was a 'ground-breaking summary of doctors and surgeons' latest views on caring for wounds and included a catalogue of our products for the antiseptic treatment of wounds.' (J&J Archive).

It is fair to say that this early journal-cum-product brochure was decades ahead of its time, and it surely paved the way for wound care journals in the modern day. **WUK**

REFERENCES

- Bishop WJ (1959) *A History of Surgical Dressings*. Robinson and Sons Limited
- Gamgee JS (1880). Absorbent and medicated surgical dressings. *Lancet* 115(2947):308–309. [https://doi.org/10.1016/S0140-6736\(02\)36794-1](https://doi.org/10.1016/S0140-6736(02)36794-1)
- Ingham JN (1983). *Biographical Dictionary of American Business Leaders, Volume 2*. Greenwood Publishing Group.
- J&J Archive <https://web.archive.org/web/20081115234705/http://www.jnj.com/connect/about-jnj/company-history/founders/>
- White E. (2014) The first absorbent cotton wool and gauze surgical dressing. *Wound UK* 10(3):106