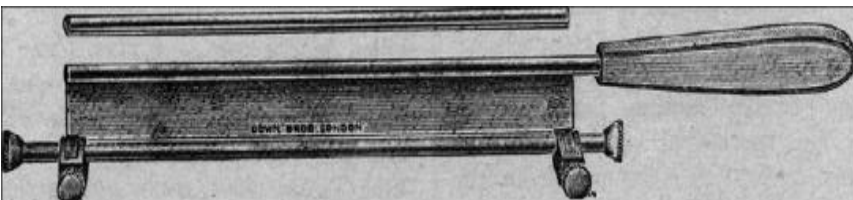


## History of the Humby Knife

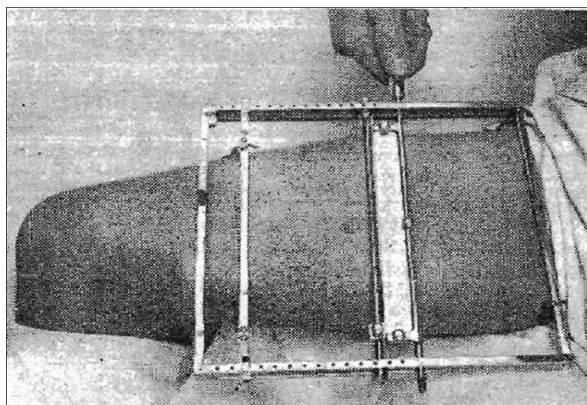
Though Mr Thomas Graham Humby was not the first to employ a grafting knife his contribution to burns treatment and care cannot be understated. His simple design ensured that grafts could be taken with minimal complications and such accuracy that all Burns hospitals in Australia have a supply of modified Humby knives 75 years down the track.

Graham was born on April 18<sup>th</sup>, 1909 in Willesden a small area of north west London. He was the youngest of three and his father was fifth generation dentist or doctor. Though admittedly from his great nephew, he wasn't the most academic student he entered Guy's Medical School in October 1930 aged 21. From graduating in 1935 he then progressed from Clinical Assistant to Assistant Head Surgeon to Head Surgeon under the tutelage from the likes of Hughes, Ogilvie, Slesinger and Eckhoff. Anecdotally it has been said that Graham was consistently working with his hands, from building boats, to modelling in clay and wood and it has even been suggested that he designed the prototypes of the Lillywhite nurse uniforms formally used in Great Ormond Street Hospital.

The first recorded description of the Humby knife as we use today comes from a small article in the 1934 BMJ edition that describes an "apparatus for skin graft cutting". His initial design was simply to add a roller to the already well-known Blair (1930) grafting knife that could be calibrated to adjust the grafts thickness.



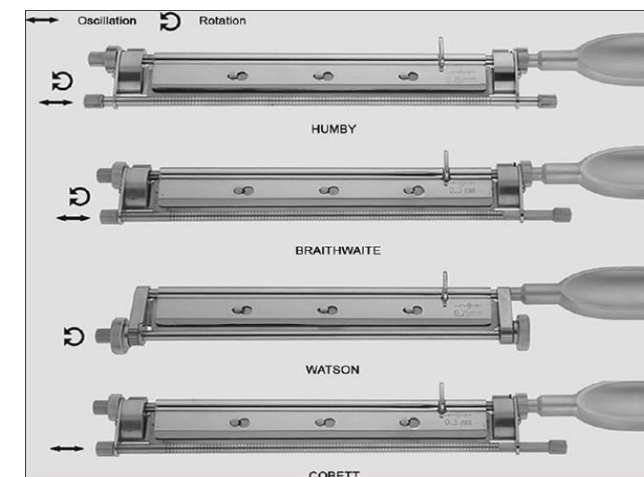
Simple yet highly effective. His rigid frame was strapped to the skin and "tiny needles...at either end pierced the skin...[which] allow stretching of the skin surface". A knife "seven inches long and wafer thin" is then inserted into the framework and slide along the taught skin. Within the next two years Humby had further modified "graft cutting razor, "discarding the rigid framework and solely relying on the pressure of the knife to determine the width of the graft.



Interestingly during this time of apparatus modification, Humby only made mention of its ability to take full thickness grafts: "In thickness, colour and small tendency to contract, the full thickness graft is the most suitable one in 99% of cases".

Though Graham Humby wrote seven papers during the 30's and 40's only 3 reference modifications to the original framework idea. Figure 1 shows the initial apparatus to the 1936 modification while figure 2 emphasis the linear progression of grafting knife modifications.

Though times have moved onto the powered dermatomes, all Burns surgeons must know their way around a Humby knife no matter the modifications. In this way we pay homage to this great man.



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- Humby G. Modified Graft Cutting Razor. Br Med J. 1936;2:1086
- Humby G. Apparatus for Skin Grafting. Br Med J. 1934;1:1078
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