Artifacts and Archives/Archives et artefacts de la pratique médicale

Groves' Amputation Knife

Medium amputating knife, made by W & H Hutchinson, Sheffield, England, ca. 1870. Steel blade and hard rubber (or some other thermoplastic material) handle.

301 mm L x 23 mm x 12 mm

Since its beginnings in the 1890s, the Dittrick Museum of Medical History of the Cleveland Medical Library Association has acquired thousands of objects. Most of these artifacts were used by medical practitioners in an area known as the Western Reserve, the northeast-
ern corner of Ohio. Because of Howard Dittrick’s Canadian roots the Museum also contains a smattering of artifacts from Canada. One of the most intriguing of these is an amputation knife given to Dittrick in 1932 by Abraham Groves. It is more than just a memento; it purportedly establishes one practitioner’s adoption of aseptic surgical procedures. While this object comprises a remarkable document, it is not without ambiguities.

In the early years of his tenure as Curator of the “Museum of Historical and Cultural Medicine,” Howard Dittrick energetically sought out donations. One approach consisted of addressing prominent physicians, asking them to give some object as a token of their career and contributions to medicine. In the case of Abraham Groves, Dittrick’s attention was prompted by an article in the 4 June 1932 edition of The Mail and Empire. There Dittrick learned that the elderly Groves was being feted for the gift of his hospital to the town of Fergus, Ontario. The article also recounted Groves’ colorful career, attributing to him the performance of a pioneering appendectomy, “the first such operation in the Western Hemisphere.” His curiosity piqued by this assertion, Dittrick wrote to Dr. Groves as follows:

In our Museum we preserve material that relates to the history of medicine. Your contribution is such an epochal one that we would very much appreciate something concrete to link up this event with your name. The writer has an additional interest in this matter, being himself a Canadian. Could you be prevailed upon to send us some account and description of this operation with special emphasis on the date. Might we also have one of your old instruments and also your autographed photograph?

Groves responded to Dittrick’s request promptly, providing details about the “appendicectomy” performed 10 May 1883 and offering to send a photograph and an instrument. Shortly after this Dittrick received another letter from Groves, reiterating his intention to furnish the items requested by Dittrick. Groves wrote:

I am sending an old amputating knife which I first used about 1874 but am not positive as to exact date. You will notice the handle split and loosened. This was caused by my boiling every instrument and all things used in an operation. I began this method or technique on July 5, 1873 when removing a large ovarian tumor. So far as I know it was the first time everything used in an operation was boiled.

Assessing the significance of these remarks about the artifact requires some understanding of the spread of antiseptic practices, or Listerism, in nineteenth-century Canada. Discussion of Joseph Lister’s antiseptic surgical procedures began as early as 1867 and two years later Robert Craik of Montreal first performed surgery using Lister’s methods. Carbolic acid spray was used for the first time in 1873 by
Archibald E. Malloch of Hamilton, who had actually studied with Lister. From the beginning, heated and sometimes sarcastic, even rancorous debate raged over Lister’s ideas and practices. Leading proponents included Fred Le M. Grassett of Toronto, J. A. Grant in Ottawa, and Thomas G. Roddick in Montreal, while critics and detractors were led by William Canniff of Toronto.5

In his study of these developments, J. T. H. Connor makes no mention of Groves. Apparently Groves contributed little if anything in print relating to Listerism. Moreover, Groves moved to Fergus soon after completing his degree at the Toronto School of Medicine in 1871 and thereby removed himself from the academic centers where the debate flourished. How, then, are we to interpret Groves’ assertion, made in the note accompanying the knife, that “previous to that date [5 July 1873] I never heard this was done.” Strictly speaking, Groves was not adopting Listerism, which entailed antiseptic precautions involving the use of carbolic acid. Instead, he was espousing rigorous cleanliness as suggested by Semmelweis and given a new imperative by Pasteur’s germ theory in the early 1860s. The sterilization of instruments by boiling, and later by autoclaving, would subsequently be incorporated into the mixed antiseptic-aseptic protocol of the 1890s. Therefore, Groves’ introduction of boiling to eradicate germs can best be seen as the practical application of revolutionary new ideas that were in the air.

The instrument, complete with Abraham Groves’ documentation, thus gives us some sense of the rate with which such ideas were disseminated and adopted among ordinary practitioners. That it survived is even more remarkable when we consider its condition: handle cracked and split, barely hanging on the haft of the blade. Such damaged goods were normally discarded. In this instance, the very damage incurred imparts special significance to an otherwise undistinguished object.

NOTES
2 Dittrick to Groves, 13 July 1932, Dittrick Museum Archives.
3 Groves to Dittrick, 20 July 1932.
4 Groves to Dittrick, 3 September 1932.

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