

dispelled from my mind all doubt and misgiving; he certainly was doing work utterly unlike any which I had hitherto seen, and I was equally sure that it was contrary to the accepted belief, called surgical science. Several resections of the elbow-joint were undergoing the processes of primary union without suppuration, or even pain. I found that I had to learn my surgery over again, and that, if Mr. Lister was correct in his teachings, operative surgery must be rewritten. It is not my purpose to recite to you of Mr. Lister's work, fortunately now well known to all surgeons, except so far as pertains to the ligature and suture. To him belongs the immortal honor of demonstrating, in a pioneer way, the vital causes of bacterial infection, or then so-called wound inflammations. These studies were inspired by the teachings of Pasteur upon the processes of fermentation, which, hitherto, had been considered, under the leadership of the great Prof. Liebig, *chemic* rather than *vital*. Convinced that a something from without of individual vital existence had been introduced and developed within the tissues, the conclusion was evident that that vital something must be excluded at the time of operation, or afterwards destroyed in, or removed from, the wound. This, to his clear and convincing judgment, made simple and easy, results which had hitherto been considered exceptional, if not accidental; to wit, the primary union of all non-infected wounds. As a corollary, it was evident that the arteries might be ligated in continuity with little or no danger from secondary hemorrhage. In order to demonstrate this important fact, it became necessary for him to pursue his investigations in comparative surgery upon the Continent, the laws of Great Britain prohibiting vital studies upon the lower animals. However, singularly enough, up to this time, it had not occurred to Mr. Lister that which now seems an equal obvious deduction, the burial of sutures, introduced for the purpose of closure of wounds. Naturally, it became evident to Mr. Lister that silk did not furnish the proper material for the ligation of arteries, when the ligature was to be cut short and left buried within the tissues, since this material was non-absorbable, and was likely to remain as a foreign body, and become a possible cause of future suffering. It was an obvious inference that a proper ligature must, for a considerable period, retain a firm grasp upon the enclosed vessel, and yet, in the end, soften and disappear. This material seemed to him ready at hand in the violin string of commerce, provided it could be properly disinfected. He had already pursued a series of investigations with a variety of