

occupation it has been used for a prison, an almshouse and a hospital. Its wards have, from time to time, been crowded with patients suffering from all forms of contagious and infectious diseases. It has been the common receptacle of typhus and typhoid fevers, small-pox, puerperal fever, cholera, and yellow fever. Although many changes have been made in its interior, yet the great and most serious defects of location and construction have remained unaltered, and may be regarded as permanent.

Bellevue may be regarded as having been a surgical hospital only since 1850, a period of about thirty-five years, during most of which period I have been personally very familiar with the practice in the several surgical divisions. The amount of surgery in the wards of Bellevue has been a gradual increase. With the removal of the New York Hospital, and during the long interval of its non-existence, the surgical practice of Bellevue became large and important, and has remained so to the present time. The surgeons of Bellevue have always ranked among the best in the city, and, as much of their practice in hospital has been public and clinical, it must be assumed that they have endeavored to the best of their ability to illustrate to their classes the highest type and best results of the science and art of surgery of their day. And yet the practice of surgery in Bellevue Hospital has, within the period mentioned, undergone so complete a revolution that one of the older surgeons would scarcely realize that he was in the same hospital where he had practised a decade ago. He would see, with horror, operations fearlessly performed that he had formerly regarded as without the pale of legitimate surgery. He would witness procedures in the after-treatment of operations which would seem to him to be fantastic, and even ludicrous. His astonishment would be extreme on finding that the first week passed without fever, and that no change in the dressings had been made. But, perhaps, the most remarkable feature of modern practice would be the rapid convalescence and final complete recovery without complication or exhaustion of ordinary operations, which formerly gave so much trouble and anxiety. To make more evident the change in practice, we may contrast in detail the several steps of operations in general, and of individual cases, the methods of treatment, and the results.

The older surgeons of Bellevue Hospital had practiced in the period anterior to the use of anesthetics. The most important general principle governing the operator was *celerity*—in order to limit as much as possible the amount of pain. Long after anesthetics came into general use surgeons dwelt with much emphasis upon the necessity of cultivating the habit of operating rapidly. The preparations for an operation were all made with reference to this one feature. So much did this

thought absorb the operator that he often became excited and annoyed by the delay. One surgeon, noted for the rapidity of his operations, was often seen, during the last moments of preparation for an amputation, to seize involuntarily the saw and move it rapidly, as if sawing a bone. Now, while every surgeon aims to diminish the period of anesthesia, mere haste at an operation is only mentioned to be condemned. No part of the elaborate preparations are designed to render the operation simply more rapid. One thought and purpose occupy the mind of the surgeon, and that is recovery without suppuration. To this end all his preparations are made, and the entire procedure is subordinated. Formerly the surgeon prepared his instruments only by keeping them free from rust, and giving them a fine edge. When he operated the instruments were taken from the case, and, without any cleaning, were so placed that he could most readily select the one required. During the operation he laid them down, or dropped them, and without cleaning applied them again to the wound. Now instruments are not only protected from rust and all soiling and kept sharp, but long before the operation they are placed in a carbolic solution, in order that any possible septic matter on them or their handles may be destroyed.

During the operation one assistant devotes himself entirely to the duty of handing the instruments to the operator, and of receiving them from him and at once submerging them in the disinfectant liquid. To avoid the possibility of laying an instrument down on an unclean surface, and then putting it in the wound soiled, towels wrung out of the antiseptic fluid are spread around the wound.

In preparing a part for an operation, an amputation, the surgeon used to do nothing farther than, perhaps, to have superfluous hair shaved off, and that, too, often without soap and water. Patients brought directly from the street or shop, with limbs begrimed with dirt and filth, were subjected to operations without bathing. Even when there was ample time for preparation little or no thought was given to the immediate condition of the part about to be incised. The accumulated secretions of the skin, and the dead epidermis, charged with poisonous animal matters, become part of the wound and its immediate surroundings. Through this layer of filth the surgeon passed his knife into the living tissues beneath, conveying to the deepest parts of the wound matters of untold septic virulence. In this simple failure to secure ordinary cleanliness of the surface, more wounds were poisoned and induced to suppurate than from any other cause. In the closure of the wound the filthy margins were often brought in direct contact with the cut surfaces, and thus the propagation of the germs of fermentation or putrefaction were implanted in a fertile soil. Now, the greatest pains