

to resort to the knife for the removal of matter within the cavity of the peritoneum. The kidney and the spleen have been successfully removed. The radical cure for hernia is one of the modern operations. Gunshot wounds, penetrating the viscera of the abdomen, yielded a mortality of 85 per cent, until it was reduced by early laparotomy to 25 per cent.

Lithotrity was a novelty in my early day, but Sir H. Thompson by removing the calculus at one sitting, with the aid of Bigelow's aspirator, has established it as the operation for all stones of less weight than two ounces. He has also revived the "supra-pubic" operation for large calculi and for the removal of vesical tumours. Uterine surgery has kept pace with the rest. The surgeon does not hesitate, should the existing disease demand it, to remove the wound with its appendages. The ovaries, I fear, too often come under his knife. He has the advantage of improved supports for the various displacements of the uterus. The operation for "vesico-vaginal fistula" should be named as a modern improvement, and the galvano-caustic battery has been brought to his aid. While portions of the nerves had been removed for the relief of neuralgia, nerve-stretching, nerve-grafting and suturing their ends when they have been divided, had not been done in my early day. Also skin-grafting and tendon suturing.

Formerly the tourniquet was the instrument used for arresting hæmorrhage during amputations. As a consequence the blood contained in the removed limb was lost. Esmarch's bloodless method is now generally adopted, though it is contended that it causes sloughing of the flaps and secondary hæmorrhage, by unnaturally augmenting the blood in the body. Simpson's acupressure needle has not accomplished that which was claimed for it. Hot water has taken the place of cold as a hæmostatic. The drainage tube is another improvement. Sayre's plaster jackets and the various mechanical appliances devised by him and others for the support of the diseased spinal column are well worthy of mention. Orthopædic surgery has made great strides. The excision of joints, especially that of the hips—so popularized by Sayre—as a substitute for that formidable and fatal operation, the removal of the entire limb, with its mortality of 60 per cent, while that of the removal of the joint and leaving a tolerably useful limb, is about 20 per cent, and the subcutaneous divisions of tendons is worthy of mention.

And now, gentlemen, it may be asked, what has this progress in medicine and surgery done towards lessening the general mortality? for it will not be disputed, that upon the saving of life and human suffering, depends the value of our work. The mortality in England has steadily decreased since 1841; it now stands between 21 and 22 per 1000. In some towns, as for example, in Hastings in England, it has recently been quoted as low as 11 per 1000. The death rate in the army in England is only two-fifths of what it was before the Crimean war, in India one-third, and in the West Indies one-tenth. The span of individual life for women in 1854 was 41·9; for males 39·9. Now it is for women 45·3, and for men 41·9. This is largely due to the various sanitary laws that have been enacted since that period, and to the better observance of those laws. While the enforcement of them at first caused more or less friction, communities are being educated to the fact that it is more costly to provide for sickness, than to prevent it. But when we give credit to the observance of sanitary laws, we must bear in mind that those laws emanated from the workers in the medical profession. And when we investigate further, we find that the laws would be a dead letter upon the statute book, were it not for the gratuitous support given by that body, therefore we are justified in arriving at the conclusion that to them belong nearly all the credit.

Let me remind you of "ovarian dropsy," a disease which runs its fatal course in a very large majority of cases, without operation, in from 2 to 5 years. Here we have an example of the triumph of modern operative surgery, now 75 per cent are saved, and it has been computed that in Great Britain and the United States alone, ovariectomy has within the last 30 years directly contributed more than 30,000 years of active life to women, all of which would have been lost, had the operation never been performed. Every successful operation upon the brain may be credited as having saved a life. Very many lives have been saved by modern thoracic and abdominal surgery, also by the excision of the hip joint instead of that fatal and formidable operation for the removal of the entire limb. The antiseptic treatment of wounds with the observance of hygienic laws, have reduced the mortality from amputations, 20 per cent. The same may be said of all serious wounds.

That devastating scourge, typhus fever, consequent upon over-crowding, impure air