

In the "History of Ovariectomy in the United States," by the late Dr. Peaslee it is stated that Dr. Nathan Smith, Professor of Surgery in Yale College, in 1821, tied the arteries with leather ligatures (narrow strips cut from a kid glove), which were returned into the peritoneal cavity, and the incision was closed, followed by recovery.

Dr. John Bellinger, of Charlestown, S.C., in 1835, successfully performed ovariectomy, tying two arteries in the pedicle with animal ligatures.

Professor Paul Eve, of Nashville, Tenn., wrote me in 1876, "I have been in the habit of using the sinews of the deer for ligating vessels, for forty years. The tendons of the deer, dried and torn in shreds, and rolled into ligatures, are what I employ. They are absorbed. I have occasionally used them as sutures."

These fragmentary experiences, drifting down to us through the years, teach that there was more or less blind groping after a something that should serve a better purpose than that which the routine of daily practice, in the use of hemp or silken ligatures, afforded. It was reserved for the present generation to make possible a scientific basis for the better consideration of ligatures and sutures in their application to the living structures. In the light of our present knowledge of surgical pathology, the opposition to the ligature in the days of Ambrose Pare, which we have been wont to attribute to the conservatism of ignorance and stupidity, is invested with a new and vital interest. The amputated limb seared with a hot iron, as a hemostatic, a measure most barbarous and revolting, gave as a result an aseptic wound. Repair was necessarily slow and tedious, but abundant granulations supervened to protect from septic absorption before decomposition ensued.

The constricting ligature, the septic pocketed wound, with little care as to cleanliness, gave such secondary fatal results that we are led to wonder that the innovation of the ligature in the closing of the great vessels became the established practice. Had it not been for the frightful dangers from secondary hemorrhage, after the use of the cautery slow healing giving imperfect results, it may well be questioned if even the indomitable spirit of Ambrose Pare could have made the innovation survive his own time.

A deeper philosophy sought solution of the problem as to the causation of suppuration in wounds, and if its prevention were not within the possibility of the *rule*, rather than the *exception*, the studies of Pasteur, Tyndall, our own Jeffries Wyman