turn of the iritis or the optic neuritis to this date, March 20, 1917.

The writer wishes to express his thanks to Dr. J. B. Ayer for his report of the examination of the spinal fluid.

A WONDERFUL PROVISION OF NATURE FOR DRAINAGE OF A PELVIC AB- SCESS. EVOLUTION OF AN AD- VENTITIOUS DRAINAGE TUBE.

BY HORACE PACKARD, M.D., F. A. C. S., BOSTON,

Professor of Surgery, Boston University.

A CASE recently operated on for the radical cure of chronic pelvic abscess presented such a surprising and wholly unique (in the writer's experience) mechanism for drainage that this record is offered. Briefly, a distinct and perfectly formed tube standing out clearly, and practically free from adhesion with any of the adjacent viscera, extended from the depths of the pelvis up along the left side to an opening in the abdominal wall, a little to the left of the median line and about two inches below the umbilicus. It had a slight mesenteric-like attachment to the pelvic parietes, easily separated by finger dissection and snipping scissors, and was covered with a smooth peritoneum-like covering. The history of the case is briefly as follows:

Two years ago, the patient was operated on in a suburban hospital for an obscure tumefaction of the lower abdomen and pelvis. A suprapubic incision was made. Digital exploration was almost at once followed by a gush of pus. A conservative course then seemed wise and a drainage tube was adjusted and the abdominal wound closed, all but an exit for the drain. After seven or eight weeks the patient began to be up and about daily but with a discharging sinus. A ventral hernia gradually developed which, at the time of the writer's operation, was large—as big as a very large grapefruit.

With the patient in the Trendelenburg posture an incision was cautiously made through the lax, thin stretched-out cutaneous scar tissue at the site of the ventral hernia. On reaching the abdominal cavity I was much surprised to find that there were practically no adhesions of intestinal loops about the ventral hernia opening, nor with the inflammatory mass filling the pelvis. The cecum and transverse colon were free and the sigmoid also, except as it merged into the rectum and passed down through the left side of the inflammatory mass. The only adhesion was an elongated tail of omentum which extended down into the pelvis.

The operation performed by the writer consisted in enucleation of both tubes—no longer recognizable as such. Both ovaries were inextricably mixed up in the ancient inflammatory mass and of course had to come out also. Little or nothing in the way of "lines of cleavage" could be found which made the operation extremely blind and menacing to adjacent structures—rectum, bladder and ureters. To insure effective down drainage, the uterus was also removed. At the present writing the patient has prac-

tically recovered from the pelvic abscess part of her difficulties. It seemed futile to attempt repair of the ventral hernia since the operative field must be assumed to be strewn with septic matter, but with perhaps more optimism than discretion, and with a forlorn hope of at least reducing somewhat the large hernial opening, the now widely separated edges of the recti muscles were quickly exposed, freshened and drawn together with three deeply placed strong linen sutures. Gauze drainage wicks were adjusted both abdominally and vaginally. Free discharge of sanguineous sero-purulent fluid occurred both up and down for a few days. The abdominal wound closed throughout except for a lingering sinus at the drainage opening and where the linen sutures were placed. The sutures were later hooked to the surface with a crochet needle and removed.

What are the constructive forces residing within which enables a patient to evolve a tubular structure several inches long to meet the necessities of drainage of a deeply-seated abscess? It is useless to conjecture, for we have no precedents to guide us except the laws of evolution. That this individual should have been able to evolve a mechanism to meet her needs is possibly explainable by the fact that she possesses remarkable cellular potentialities. For two years she had carried a focus of suppuration which yielded copious discharge of pus. Through all this septic handicap and depletion of her forces she carried and maintained a thick head of hair reaching to her ankles. She had also carried the ventral hernia without support except such as was afforded by a common cotton binder. She also exhibited remarkable tissue repair following the operation; for, according to usual precedents in such cases, the wound should have suppurated throughout. I have no knowledge of the character or source of the original infection. A culture taken from the sinus just prior to the operation showed a simple staphylococcus infection.

DO VISCERAL ADHESIONS EVER RAREFY AND DISAPPEAR?

From the writer's experience in similar cases it seems almost impossible to think of such a case following the course above described in the history given, without intra-visceral and ventro-visceral adhesions. The adventitious drainage tube was a totally separate entity; in no part of its length did loops of intestines, omentum or pelvic parietes enter into the structure.

This case, with two others which have occurred in the writer's experience, leads to speculation upon the possibility or the probability that, under favoring conditions, abdominal visceral adhesions undergo rarefaction and disappear. In both widespread infection of the peritoneum occurred, one from a pelvic abscess, the other from an appendicular abscess. Long after, I had opportunity of opening the abdomen, in one for repair of a small fecal fistula, and the other the removal of an ovarian tumor. In both, appearances indicated that there had been a remarkable loosening up and rarefaction of adhesions.