

prevent its spread. Puerperal fever was, in his opinion, preventible in the large majority of cases, and by the adoption of strict antiseptic precautions the spread of it might be prevented.

On the motion of Dr. Poole, seconded by Dr. Powell, a hearty vote of thanks was accorded the President for his able address.

## TREATMENT OF CARCINOMA OF THE BREAST.

At a meeting of the Philadelphia County Medical Society, held Sept. 26, 1888, Dr. S. W. Gross (*Jour. Am. Med. Assoc.*, Oct. 20, 1888), urged the necessity of a more extended operation than is usually performed in the treatment of this disease. Dissatisfaction with the results obtained in his own practice and in that of others led him, ten years ago, to adopt a radical procedure, the object being to effect riddance of all the tissues in which the experience of hundreds of years demonstrates that a recurrence or a new outbreak of the disease takes place. He amputates, by a circular cut, the entire breast with its overlying skin and fat, dissects off the pectoral fascia, and carries an incision into the axilla, through which he is enabled to extirpate its contents. If nodules are found in the pectoral or intercostal muscles, they are removed with an unsparing hand. The edges of the wound are then approximated, the closure of the breast incision being greatly facilitated by raising the flaps from the subjacent tissue from one and a half to two inches, and the employment of button sutures. In some cases the wound cannot be entirely united, so that it has to heal by granulation. He removes the entire breast and attacks the axilla in all cases because recurrence or new outbreak of the disease ensues in tissues which are left behind by the less radical modes of operating. The accumulated observations of surgeons show that recurrence may be expected in the skin and subcutaneous tissues, especially at or near the cicatrix, in the fascia covering the pectoral muscles, in the remnant of the breast from which the tumor alone has been excised, in outlying lobules which were overlooked dur-

ing the performance of the less complete operation, and in the lymphatic glands, especially those of the axilla. Sound pathology demands that the entire mammary gland, along with its circumjacent tissues, should be amputated, first, because we have to deal with a carcinomatous degeneration commencing at one point, from which the cells migrate in various directions into the remainder of the breast and the surrounding tissues, the extent of which migration into the lymphatics and their radicles it is impossible to determine with the naked eye; secondly, because the disease is sometimes multiple, and the smaller growths are only detected on examining the breast after its removal; thirdly, because minute lobules frequently lie at some distance from the main body of the gland, particularly toward the axilla and the clavicle, which may subsequently become the seat of a new outbreak, even as late as ten years, as in a remarkable instance recorded by Banks; and, fourthly, because nodules may be found in the subcutaneous tissues at a relatively great distance from the breast, which would certainly have escaped detection in the lesser operations. He attacks the axillary glands in every case because they are almost always diseased, even though they cannot be felt prior to operation. Of his forty-five cases, the glands were not palpable in 18, but in 15 of these they were present when the axillary space was opened. In 57 out of 65 similar cases, Kuester found that the glands were infected, so that their combined experience demonstrates that the glands are invaded in 86 out of every 100 cases in which there is no external evidence of their implication. Hence, if the axilla be not evacuated of its contents in every case, a subsequent operation will almost surely be demanded. Dr Gross claims that this extensive operation is followed by better results than are any of the minor operations. Of his 45 cases, 2, or 4.44 per cent., perished from the operation, and 5 were lost sight of after recovery. Deducting the 7 that died and could not be traced, 38 cases show local recurrence in 11, or 28.95 per cent. Including the deaths, out of 40 cases, 9, or 22.5 per cent., recovered. Of