so strong as incomplete work. Better do nothing than half do the operation. Even after the most radical steps the mortality must always be trifling in competent hands. Under the present system of surgery there is but one danger of the older surgeons left us—shock—unless by accident some injury be done the great vessels of the axilla. In a recent paper of great thoroughness, which makes its statistics of unusual value, Dennis, of New York, reports 71 cases of complete removal of the breast, with but one death, that one from a hæmorrhagic diathesis. I have nine times in the last three years removed the breast and opened the axilla without accident and almost without shock, usually securing primary union and getting the patient out of bed in less than a week. These operations were all done in private practice. The patients are all living with one exception. In this case, death occurred at the 14th month from carcinoma of the liver; there was also recurrence in the cicatrix. In one other case in which a considerable portion of the wound was left to heal by granulation, owing to extreme infiltration, the cicatrix has always had an unhealthy look and occasionally weeps a non-offensive serum, but the general health of the patient is wonderfully improved, indeed, perfect but for some disabling of the arm on the affected side; and now after quite two years, she feels that she was rescued from the grave. The other seven patients are without any evidence of disease.

This number is far too small to consider, as data, and the microscopical record of several of the cases is wanting, hence no detailed report is worth while. They merely help to show what may be gained by complete operation and that the added danger is practically *dil.* With respect to recurrence of the disease, I shall say little. The title of Dr. Dennis' paper above referred to is "Recurrence of Carcinoma of the Breast." He gives as the influences of recurrence,

1st. The age of the growth. 2nd. The extent of infiltration. 3rd. The completeness of the opertion. 4th. Histological chracater of the carcinoma itself.

He claims that of this last cause, he has made careful study, to find that in proportion as the histological character of the tumor varies from that of the surrounding structure it is malignant and recurrent.

As a result of Dr. Dennis' operations, the percentage of cases surviving three years without recurrence is thirty. A very considerable proportion of the remaining were progressing well but are not yet up to the three year limit.

Thus, then, we have the practical aspect of the case: Certain and early death without operation. Accurate and early diagnosis in doubtful cases by incision. Safe and re-assuring aid by complete operation. A most enccuraging hope of cure in one-third of all cases.

To secure such results, however, are demanded early and complete operative steps even in the most favorable looking cases. It is impossible to tell the extent of infiltration, or the lymphatic involvement. The operation must be radical to the extreme.

There is a certain class of patients upon whom no capital operation can be undertaken. In addition there are cases of carcinoma and sarcoma in which infiltration and ulceration are so extensive—in which vital structures are so involved—or in which metastases are already present, when operation is positively contra-indicated. These any wise surgeon will recognize. But of the other class of cases—so large and promising so much, there is a hope that skill and patience will determine results now past belief.

The operation: At the inner angle of the wound, a granulating surface heals with great ease and no fear need be entertained in cutting away freely. It is always best to remove completely the skin under which the cellular tissue is infiltrated even with inflammatory products.

To dissect off such deposits leaves a thin flap which may slough, and less satisfactory repair is obtained than when a free open wound is made at once. All fascia and all infiltrated muscle—even to the ribs should be completely cut away—with resection of the bone, if involved.

In firm but non-infiltrating tumors which dissect off freely, the muscular surface should be left stripped of fat and fascia. The flaps adhere more readily to clear muscular surfaces, and sloughs are less likely under unfavorable conditions. When the infiltration and ulceration are considerable it is always imperative to make an incision circumscribing all possible disease, without regard to the feasibility of getting flaps.

In removal of the glands, the vessels should always be exposed by extending the incision to the insertion of the great pectoral muscle and locating the axillary vein. All fat, fascia, and glandular tissue should be removed. The subscapular vein should be tied before division if it can be found. There will then be no hæmorrhage unless the muscles are divided. This step may be necessary when infiltration has involved these structures; even the axillary vein has been resected when found diseased.

The fingers should be passed up under the pectoralis minor and the subclavicular space searched for glands always.

The wound should be irrigated with 1-1000 hot bichloride and then washed out with 1-3000. A short drain should be put in the axilla and brought out through a counter opening.

The axilla should be closed as far as approximation can be made. If the inner part of the