the patients indigo by the mouth in cachets containing about 5 grs. The bile from the fistula was then examined for pigment, and in every case, after varying intervals, it was found.

THE URINARY TRACT.

In a case of fistula in the lumbar region following upon nephrectomy, the introduction of indigo into the bladder was followed by the appearance of the pigment in the discharge escaping from the fistula. Other experiments on patients who had at the time open supra-pubic cystotomy wounds, showed that particles of pigment introduced into the external urinary meatus were conveyed along the urethra and appeared in the urine coming from the wound.

MAMMARY GLAND.

Not the least interesting of Mr. Bond's experiments were those by which he showed the transference of indigo particles from the surface of the nipple into the depths of the mammary gland. This process he demonstrated on several occasions after the removal of a breast for malignant disease.

Although before accepting them as scientific facts it is necessary to await their verification at the hands of other investigators, it is not altogether unprofitable to meditate upon the benefits which are likely to accrue to medical and surgical practice if Mr. Bond's observations prove true. In the first place, if particles of indigo can traverse the large intestine or the ducts of the mammary gland in a direction contrary to the usual current in these canals it is probable that micro-organisms can do likewise. This may be the true explanation of the ascending infection which occurs in urinary stasis, in biliary stasis, and so forth. It may account for the frequent occurrence of salpingitis and pelvic peritonitis as a result of gonorrhoea in the female. And without mentioning other of the numerous "ascending infections" which are such a vexation to mankind, it is certain that, if Mr. Bond's explanation of their mechanism stands the test of time, much may be done in the future by means of surgical cleanliness to prevent this kind of microbic invasion.

SKIN-GRAFTING.

In the course of a very interesting paper on skin-grafting, Mr. A. Young¹ makes a strong plea for the use of grafts which are composed of the whole thickness of the skin. The grafts, which may be two, or three, or more inches in length, can be taken from a recently amputated limb, or from the patient himself. In the latter case the operation is carried out as follows: By two incisions extending to the deep fascia a long strip of skin is removed from some convenient situation, for example, the anterior part of the thigh. The skin thus removed is at once transferred to some warm sterile normal saline solution, while the wound in the thigh is sutured, dressed and bandaged. The strip of skin is now taken out of the saline solution and laid with the outer surface downwards in the palm of the operator's left hand, while with a pair of sharp scissors curved on the flat he quickly cuts off all adherent fat. When this has been done the

surface about to be grafted is gently irrigated with warm saline solution and the grafts are applied. Mr. Young disapproves of scraping or rubbing the granulations previous to laying the grafts, on the grounds that the bleeding caused is a distinct drawback, and that the grafts will readily "take" when laid directly on intact healthy granulations. To retain the grafts in position a single layer of wide-meshed muslin is placed over them, and this is covered with several layers of sterile gauze moistened with sterile saline solution. A large sheet of gutta-percha tissue is placed over these dressings to retain the moisture, and over this a copious swathing of wool is bandaged lightly and equably. Subsequently, all the dressings except the wide-meshed muslin are removed daily, any discharge which has exuded is washed away by a gentle stream of saline solution, and a dressing similar to the first one is applied.

The chief advantage urged by Mr. Young in favour of this method is that the grafts almost never fail, while probably it will have been the experience of most surgeons who have frequently made use of Thiersch's operation to have met with many failures. Sometimes the grafts do not "take" at all, while quite commonly, after growing well for a time, they ulcerate, and show other evidences of deficient vitality. The objections to removing large strips of skin from other parts of the patient's own body in order to obtain the grafts is fairly obvious, and it is doubtful whether the cautious surgeon will resort to the method in ordinary cases unless he has already tried Thiersch's method and found it to fail.

¹ International Clinics, vol. i., 1905.

THE DURATION OF LIFE AFTER THE APPEARANCE OF ALBUMINURIC RETINITIS.

MR. SIMEON SNELL¹ considers that the duration of life after the appearance of retinitis in cases of albuminuria is less in hospital than in private practice. Private patients with their better financial position are able to attend to the dietetic and hygienic treatment demanded in Bright's disease, and in hospital patients, further, the influence of alcoholism has probably a greater range. The statistics collected by Dr. G. O. Belt, of Washington, show that in a large collection of cases 62 per cent. of the private patients died in the first year and 14 per cent. lived more than two years. In hospital cases, on the other hand, 85 per cent. died in the first year and only 6 per cent. lived more than two years. Mr. Snell quotes a series of private cases in which the average duration of life was just under a year. This contrasts with a series of hospital cases observed by Dr. Miles Miley with an average length of survival of four-and-a-half months. In the former group there were several instances of survival for two to three years and in one case death was postponed for four-and-a-half years. These figures do not refer to albuminuric retinitis occurring during the course of pregnancy.

¹ Lancet, July 15, 1905.