iodoform), and by external applications (as by inhalations of eucalyptol); and the application and influence of the antiseptic should be complete, continuous, and prolonged.

DERMEPENTHESIS.

(Δέρμα—ἐπέθεσις.)

By G. F. CADOGAN-MASTERMAN, L.K.Q.C.P.I.

THE valuable expedient of skin grafting is attended with several inconveniences. The donor finds the "snip" rather painful, the little sores are some days in healing, and there is danger, if alien skin be used, of conveying disease with it; and, when there is a large surface to be covered, the process is tedious and often disappointing. Frog's skin has been used, but these amphibia are so repulsive to many people, and especially to women and children, that after two trials and failures I gave it up.

About two years ago I was treating in the usual way a broad wound surface in a young farmer, who while riding sustained, from the shaft of a passing cart, a ragged, lacerated wound extending from the middle of the thigh to Poupart's ligament, and involving the muscles. The wound was cleansed and treated aseptically, but the crushed integument at the back of the thigh and much of that in front sloughed away altogether, leaving a surface of about ten square inches to cover, and, after a week of human skin grafts, this was speedily effected with portions of young wild rabbit's skin. The second case was one of a large varicose ulcer, and quite successful; the third, a middle-aged tradesman, had severe orchitis, the result of an accidental blow. Delirium tremens ensued, and probably as the result of further injury, the whole of the integument of the scrotum sloughed away from the root of the penis to the perineum, leaving the tunic of the testicles covered only by the pale, pink lattice of the cremaster muscle. There was a border of but half an inch of healthy skin left after the slough had separated, and the case was complicated by large bed sores and the extremely bad state of the patient's health generally. However, I found that a disc of skin, two inches in diameter, would cover the testicles, and again tried the rabbit as its source. The animal was killed by a blow on its neck, and the previously shaved and marked out piece expeditiously cut from the abdomen, pressed smoothly over the wound, covered by a piece of wet lint; then a fair-sized hot poultice, which was in turn kept at a proper temperature by a frequently refilled hot-water cushion. At the end of forty-eight hours the applied skin was cautiously examined, and found to be adherent. It was re-dressed as before, and supported by a special suspensory bag padded with sublimated cotton-wool. On the fourth day the outer layers of the skin separated, leaving a firm, smooth surface more like the mucous lining of the lips than integument, and, except that it has greatly thickened, so it remains to the present time.

The fourth was a pale, flabby ulcer, after a very tedious case of hip-joint disease; and therein, after many trials with rabbits of all ages, the plan failed utterly. The fifth was a very severe case of burning, in a little child; the whole of the skin of the back from the shoulders to the nates, the back of the arms and thighs, had been destroyed, in some places down to the muscles. After the carbonate of soda treatment (which relieved the pain immediately), and the surface had been pretty well cleared from sloughs by lotions of very dilute nitric acid under an outer dressing of iodoformed cerate, a number of rabbit-skin transplantations were made at intervals of about three days. The greater number adhered, and I had succeeded in covering nearly half the trunk, when the child unfortunately died from pneumonia, three months after the accident.

In order to secure success, healthily granulating surfaces should be selected for treatment, and young wild rabbits for the discs of skin. These may be from 0.5 to 1.5 inch in diameter, and, operating alone, rarely more than one can be taken from each animal; for, although it is killed in the customary manner by a blow at the back of the neck, the skin must necessarily be still alive to be of any substitutional value. If it were not for an obstructive Act, the best plan would be to chloroform the animal, remove as much skin as necessary, and then kill it before it had recovered consciousness. As it is, not a moment must be lost in the transference. Young wild rabbits are best, because their skin is very thin, contains no fat, and separates readily from the subjacent fascia; and I think discs not larger than a shilling succeed best. There is no need to remove the fur, it comes away within a week; and the skin should be pressed closely down on the surface of the wound, so as to expel the air, and kept thoroughly warm by a poultice or hot-water bag.

I have used the term "adhering" in place of "growing," for I am in doubt if the transferred skin really unites and grows with the surface it covers; in every case the fur-bearing layer separated after a time—so, it can be only the inner, perhaps the superficial, fascia, which is revitalised; and, although prolongations could be seen starting from the edges of the adhering discs, they were neither so marked nor so vigorous as those from grafts of human skin. The latter I have often noticed to start the growth of new skin from sites in which they have themselves apparently perished; and it is possible that the rabbit skin may act rather by influence than substitution, and so determine the conversion of granulation cells into integument under the smooth soft, and, possibly, still living shield.

CASE OF OBSTRUCTION FROM GALL STONE—SPONTANEOUS FRACTURE AND RECOVERY.

By ARTHUR JAMISON, M.D., London.

THE discussion at the meeting of the Clinical Society on January 13th, on the treatment of gall stones, and the question are we to interfere at once in subsequent obstruction from them induces me to place on record the following case. Probably early laparotomy in very urgent cases is the best procedure, but at times cases crop up in practice with such unanticipated endings, that they may rank as true clinical experiments. The patient, a woman 36 years of age, of very spare habit, had long suffered from gastric troubles, slight jaundice, and occasional attacks of severe pain. In the right hypochondrium she had a swelling over the region of the gall bladder, moving up and down with respiration, and general tenderness around it. I was sent for to see her in great haste, being told she was dying. When I got to her bedside I found her in comparative ease. She told me she had had an attack of the most violent pain and intense retching which had suddenly ceased. The tenderness over the liver was much less and the swelling hardly to be felt. Things went on very well for two days, when another attack of acute pain came on, now referred to the region of the umbilicus, great retching and constant nausea; there had been no motion since the previous attack of pain. The pain now came on in paroxysms, the intestines could be seen moving tortuously about, and she said the pain seemed to "stick in one spot." There was no rise in temperature and the pulse kept fairly good. It was obvious that the case now was one of obstruction from a gall stone. I told her plainly that the issue now might be fatal, and strongly urged her to submit to operation. This she steadily refused to do, having heard of a fatal case, so matters went on for four days longer, no motion had been passed nor any flatus. I kept repeatedly urging her to have laparotomy performed, but she still steadily refused, and I became more and more confident in telling her of the outlook in her case. Judge of my surprise when in the evening I found her much better, she said she was quite well. She told me that shortly after my last examination she felt something give way during a violent pain, and almost immediately afterwards passed a huge bile-stained motion, and within an hour another copious motion. This had not been thrown away, and on examining it I found two pieces of what had been a large gall stone of softish consistence. I fancy the stone must have been gripped and fractured spontaneously from the force of the intestinal contractions. However the patient quickly mended and got comparatively strong. She rather drily asked me if I did not think she "was better unopened."

Of course, during the treatment, she was kept constantly under opium; but she was quite sure that, in the form of morphine suppositories, she got much more ease than when given either by the mouth or hypodermically. This was not the first time I had heard patients prefer opium by the rectum. This patient refused to have any hypodermic injections of morphine, when she said she got so much more relief by a suppository she could introduce herself. When the symptoms of obstruction were obvious, she was kept to as little iced water to sip as possible. She said that all attempts at rectal feeding brought on her paroxysms of pain, and preferred to keep to her iced water. These two therapeutic facts I have seen brought out, in cases of obstruction, over and over again; and I am perfectly sure that, till the pulse and temperature begin to rise, absolute starvation, and morphine by the rectum only, give the best chances of success. But, if the temperature or pulse rise (and I think the pulse is the safest guide), then laparotomy should be resorted to without delay. It is quite possible Mr. Tait's suggestion of trying to crush the stone might be tried first. It would do no harm. At all events, this case goes to show that the chances of spontaneous fracture should not be omitted from our calculations.