[April 20, 1907.

284

1. With the tips of the fingers, a movement principally applied to the head.

2. With the palmar surface of the hands. The fingers, held straight and close together, strike the muscles evenly and rhythmically, moving in every direction. This movement is suitable and agreeable over the whole body.

2a. The palms are contracted so as to form a hollow, or cup. It is used on the abdomen, the thigh, and the back.

the thigh, and the back. 3. With the ulnar border of fingers and hands alternately. This is mostly used on the patient's back.

4. With the ulnar border of the closed hand; alternately, if both hands are worked. To be applied to arms and legs, but principally to thighs.

5. With the clenched hands, working alternately, used on thighs and buttocks.

With the exception of the last-named method, all tapotement should be light, sharp, and springy, performed rhythmically and rapidly. Tapotement excites capillary circulation, stimulates nerves, and causes muscles to contract. Tapotement is not always used, but chiefly when it is desired to add strength to the treatment.

Massage should never be given except on a physician's orders. When employed as a treatment after injuries and diseases, it should be in the hands of a person who not only possesses the necessary technical skill acquired by painstaking toil in massage, but who has also a thorough knowledge of the movement cure, and understands the nature and course of the disease as well. Massage is either general or local: general, when applied to the whole body; local, when applied to a particular part of the body.

General Massage: Begin with effleurage on dorsum and sole of foot, followed by thorough kneading and pressing. Apply tapotement to sole. Centripetal stroking (effleurage) of leg, followed by kneading, and more or less friction, as the case may call for; tapotement to the thigh. For the back, begin with effleurage at the base of the skull, employing both hands, and, as they are brought downward, an alternate lateral movement is executed. The same movement can be made upward, kneading with the palms of the hands outward from the spine over the entire back and intercostal spaces, digital friction and tapotement following. In some cases special pressure or vibration is applied on both sides of the spinous processes. The manipulations for the lower part of the back are effleurage, kneading as well as tapotement with the ulnar side of the hands over the sacrum. The manipulations on the gluteal muscles should be deep and strong, to

penetrate all the deep muscular layers: stroking, kneading, friction with thumb and heel of hand, and tapotement with the clenched hand.

Hands and Arms: Effleurage to each finger separately, friction with the thumb between each metacarpal; on the back of the hand; then the balls of the little finger and thumb are kneaded. Effleurage of the arms follows, by kneading and tapotement with the ulnar side of the fingers.

Chest: Preliminary breathing; effleurage begins on the neck and is carried downward on each side of the sternum; then kneading and friction of the pectoral muscles and intercostal spaces. This manipulation must be carried out more gently than that on the back or limbs, for these tissues will not tolerate being so vigorously manipulated.

Massage of the Breast: Gentle stroking, grasping, and impressing, beginning at the periphery of the breast and working toward the nipple. The parts should be well lubricated, and great care taken to avoid so great a pressure as to bruise the tissues. The manipulation should not be undertaken unless the breast contains milk, as otherwise more harm than good will often be done.

Abdomen: Preliminary deep breathing, chest lifting, effleurage, palm kneading over the whole abdomen, then kneading in the direction of the colon, shaking, and vibration. In constipation, the following movements are often prescribed:

(1) Passive flexion and extension of legs;

(2) Resistive flexion and extension of legs;

(3) Passive circumduction of legs;

(4) Resistive abduction and adduction of legs;

(5) Active slow raising of legs to vertical position; followed by slowly lowering the legs;

(6) Slow raising up and lying down of trunk, legs being fixed.

Massage of the Head: Effleurage on forehead, friction on the temples, pressure on each supraorbital nerve, thorough friction over the whole head, thorough moving of the scalp on the skull, double pressure with both hands, with or without vibratory motion, tapotement with finger-tips.

After general massage the patient should have a sensation of comfort, whereas during, and sometimes for a little while after, local treatment, pain may often be unavoidable. Duration for local treatment, ten to twenty minutes; for general massage, from twenty minutes to one hour. The head is not necessarily included in general massage.

Local Massage: To relieve sensitive parts when applying local treatment, administer first derivative massage to the tissues above-



