

do so in moderation, but with ever increasing force and effort in order that all the elements which go to make up an effective physical unit may be brought to their highest efficiency. To accomplish the desired result it is necessary, not only to obey the part of the law which demands action, but also that part which says *action within physiological limits*. It may be difficult to determine at all times the exact physiological limits, but there certainly is such a limit, and to pass that line is to produce "strain," and to interfere with and delay the end sought, and to lower permanently the element of possible achievement for that individual.

Efficiency may be lost or lowered through disease. What can be done towards restoring wholly or in part to normal power? Perhaps no better illustration presents itself here than that afforded by the disability which so frequently results from infantile spinal paralysis. This affection is a paralysis of motor power, disables the lower extremities most frequently, results from inflammation of the large motor cells in the anterior columns of the spinal cord, manifests itself irregularly in the various groups of muscles, seldom causes complete motor disability of any extremity, and shows a natural tendency towards recovery, continuing for some years, but never becoming complete.

The motor cells of the cord are seldom entirely destroyed. Some cells, doubtless, which preside over the action and nutrition of their nerve fibres lose all power; some are injured to such an extent that the nerve fibres passing from them to muscle convey their messages but imperfectly; and others are probably capable of restoration to a condition nearly normal, while still others escape uninjured.

Occasionally all the muscles of the lower extremity are so entirely without motor control that not a movement can be made. In many other cases the loss of power is partial. For example, at the knee the power of extension is lessened or lost, while flexion may suffer little or no impairment. In this case there is a lack of balance, and the flexors acting continuously, while not opposed, or only partially opposed by extension power, produce habitual or permanent flexion at the knee—a definite deformity with constant impairment of function.

Similarly, an unequal degree of paralysis of the various muscles which control the ankle produces a lack of balance. The muscles which draw the foot inward may be stronger than those which oppose, and the foot be constantly drawn inward, permanent deformity results, and there follows a case of paralytic club-foot and great interference with function, an interference which is now not only due to loss of muscular power but also to