painful on use must be regarded as seriously disabled. A little used part of the musculoskeletal system may be expected to show evidence of disuse, either through atrophy, the condition of the skin, absence of normal callosity or the like.

### §4.41 History of injury.

In considering the residuals of injury. it is essential to trace the medical-industrial history of the disabled person from the original injury, considering the nature of the injury and the attendant circumstances, and the requirements for, and the effect of, treatment over past periods, and the course of the recovery to date. The duration of the initial, and any subsequent, period of total incapacity, especially periods reflecting delayed union, inflammation, swelling, drainage, or operative intervention, should be given close attention. This consideration, or the absence of clear cut evidence of injury, may result in classifying the disability as not of traumatic origin, either reflecting congenital or developmental etiology, or the effects of healed disease.

# § 4.42 Complete medical examination of injury cases.

The importance of complete medical examination of injury cases at the time of first medical examination by the Department of Veterans Affairs cannot be overemphasized. When possible, this should include complete neurological and psychiatric examination, and other special examinations indicated by the physical condition, in addition to the required general and orthopedic or surgical examinations. When complete examinations are not conducted covering all systems of the body affected by disease or injury, it is impossible to visualize the nature and extent of the service connected disability. Incomplete examination is a common cause of incorrect diagnosis, especially in the neurological and psychiatric fields, and frequently leaves the Department of Veterans Affairs in doubt as to the presence or absence of disabling conditions at the time of the examination.

## § 4.43 Osteomyelitis.

Chronic, or recurring, suppurative osteomyelitis, once clinically identified, including chronic inflammation of bone marrow, cortex, or periosteum, should be considered as a continuously disabling process, whether or not an actively discharging sinus or other obvious evidence of infection is manifest from time to time, and unless the focus is entirely removed by amputation will entitle to a permanent rating to be combined with other ratings for residual conditions, however, not exceeding amputation ratings at the site of election.

#### § 4.44 The bones.

The osseous abnormalities incident to trauma or disease, such as malunion with deformity throwing abnormal stress upon, and causing malalignment of joint surfaces, should be depicted from study and observation of all available data, beginning with inception of injury or disease, its nature, degree of prostration, treatment and duration of convalescence, and progress of recovery with development of permanent residuals. With shortening of a long bone, some degree of angulation is to be expected; the extent and direction should be brought out by X-ray and observation. The direction of angulation and extent of deformity should be carefully related to strain on the neighboring joints, especially those connected with weight-bearing.

## § 4.45 The joints.

As regards the joints the factors of disability reside in reductions of their normal excursion of movements in different planes. Inquiry will be directed to these considerations:

- (a) Less movement than normal (due to ankylosis, limitation or blocking, adhesions, tendon-tie-up, contracted scars, etc.).
- (b) More movement than normal (from flail joint, resections, nonunion of fracture, relaxation of ligaments, etc.).
- (c) Weakened movement (due to muscle injury, disease or injury of peripheral nerves, divided or lengthened tendons, etc.).
  - (d) Excess fatigability.