tors is greater than that of one of a healthy parentage. Having a closer bearing, however, upon the vulnerability of the individual is the condition of the system which results from preceding disease or conditions which impair the general health and lower the vitality. Many experiments have been performed upon animals showing that after injection of the virus of tuberculosis the liability to development of the disease is increased by injury, such as fracture of bones, wounds of joints, and by unsanitary conditions of living.<sup>2</sup>

Clinically, it will be found that in a large proportion of cases the appearance of the disease has been preceded by some illness, such as measles, scarlet fever, whooping cough, chronic diarrhea. These lower the resisting power of the individual, and the virus, which otherwise could have been successfully thrown off or held in check, finds a suitable soil for development.

Always of prime importance that an early diagnosis should be made, it is especially so in tubercular affections of the joints.

## SYMPTOMS.

- (r) The carriage of the individual in moving about is likely to be one of the first indications of this affection. At a very early date the spine is immobilized by nature in the affected area, and the individual moves about with a cautious gait, and without the natural ease and grace which comes from unconstrained bending of the body.
- (2) Pain in the distribution of the nerves which find exit in the immediate vicinity of the diseased vertebræ is a very constant and early symptom. If the lower dorsal or upper lumbar be affected, pain is frequently complained of in the gluteal and upper femoral regions, and the suspicion is often expressed that there is disease of the hip joint. When the tubercular focus is higher up in the spine, it is not uncommon to find the child complaining of "belly-ache"; and treatment for stomach and other visceral derangements is by no means uncommon.
- (3) When the back is fully exposed, and the patient allowed to stand on a level surface, without shoes, then voluntary flexion of the spine to the greatest extent permissible, without causing pain, will show what part is affected. Reflex muscular spasm will prevent or lessen movement between inflamed vertebra, just as it lessens or prevents motion at a diseased hip or knee joint.
- (4) Deformity<sup>3</sup> may reveal the presence of disease and its location. The angular deformity from which the affection often takes its name is not here referred to. When the tubercular process has advanced so far that a kyphosis is present, then aids to the diagnosis are not required, and it is useless to make further examination. Just as deformity is produced