ment, but falls off into drowsiness when left alone, and becomes very irritable when disturbed. Hyperesthesia, a very important sign, especially the so-called spinal pain. Later, as the disease progresses, other signs and symptoms make their appearance, such as Kering's and MacEwen's signs. Paralysis of some part of trunk and extremities. There are no eye disturbances at any time as in meningitis. Urinary retention is a frequent symptom.

## DIAGNOSIS

During the early onset of the disease, before paralysis has set in, the above mentioned signs and symptoms plus a lumbar puncture justifies the diagnosis.

## BLOOD PICTURE

There is a Leucocytosis in all cases averaging from 8,000 to 40,000, with an average of 18,000, while the average Differential, shows

Poly's 55 Per cent. S. L. 35 " L. L. 11 " Eos.—normal Bas— "

## SPINAL FLUID

A spinal puncture should be carried out in every questionable ease, and bedside diagnosis from the characteristic appearance of the spinal fluid should be made; by so doing the extent and severity of an epidemic may be reduced or avoided. For the early diagnosis of the disease with the aid of spinal fluid, three bedside tests have proven of value<sup>6</sup>.<sup>7</sup>

First sign noticed is the increased amount of pressure as the fluid is obtained on puncture.

Second. This fluid may take on a ground glass or slightly hazy appearance, the haziness being due to the increased amount of cells in the fluid. In a few cases there has been obtained a clear fluid<sup>8</sup>, simulating that of T. B., meningitis. By the aid of artificial light it will be readily demonstrated. There will also be seen floating particles suspended in the fluid. The particles are the lymph cells. Upon the slight shaking of the tubes, the cells will be seen to scatter about in the fluid.

Three—Normal fluid, upon shaking vigorously, will form a foam lasting about one-half hour upon standing, while the foam of the spinal fluid in this disease lasts between one and two hours. The microscope is an invaluable article at the bedside and laboratory. Chemical test demonstrates (1) albumin positive, (2) globulin positive, (3) Fehling's