

areas of disease, a good many fallacies of reasoning have obtained currency in respect to centers of function. Heubner cites pathological cases, which indicate that obliteration of one of the large vessels of the cortical system, or any of its branches, have during life given no pronounced symptom. (Charcot).

Let us now turn to the arterial circulation in the *grey central ganglia*. This section includes the *thalami optici*, the *corpora striata*, and their appendages. It needs only a moment's reflection of our anatomy to realize that the central ganglia are largely supplied from the Sylvian artery, as well as from the nutrient vessels, which spring in large numbers from all the cerebral arteries and from the basilar at its bifurcation. The sum total of all these, show a much greater capacity for blood supply per square inch, than in any other part of the brain. Such being the case, we know this augmented normal supply means proportionally increased activity. Hence it follows as a matter of fact that any abnormal increase or decrease of blood means a greater or less physical or mental perturbation. Congestion, as well as anæmia, is followed by the same results, that is, more or less suspended sensibility and retarded voluntary action. Where the blood supply is found to be naturally the most copious, there is greater susceptibility of this kind, and as a corollary it may be added, there is functional activity in proportion to the normal blood supply. The difference in this respect between the cortical substance and the central parts is most marked. This points to the former as being only subsidiary to the latter, taking the circulation as a physiological basis to judge from in this respect. Although the central and basal ganglia are much less in bulk than is the cortical substance, yet about one-half of the blood which enters the encephalon is distributed to the