He believes that the reception of visual impressions is entirely confined to these convolutions; that therefore the second and third occipital convolutions as well as the lingual and fusiform lobules may be involved in a lesion without producing hemianopsia (unless, indeed, it should extend to the white matter of the cuneus), and reminds us that in such cases where a lesion has been detected in the cuneus or O^1 without apparent hemianopsia, the latter condition, when of no great extent, has to be sought for perimetrically.

On the other hand, he locates psychical blindness in the rest of the occipital lobe, and remarks that it is always double-sided, even where there is only one lesion. He is inclined to suspect that physiological variability is associated with the well-known anatomical variability of the occipital lobe.

Nothnagel's results as to motor centres agree with those of Ferrier, arrived at by stimulation of the cortex. They are situated in the central convolutions (ascending frontal and ascending parietal) and the paracentral lobule: a lesion of the latter may paralyze both extremities, while the leg only is involved in the upper part of the central convolutions, the arm in the middle, and the face, lips and tongue in the lower part. Judging from monoplegias, the result of small circumscribed cortical lesions, he is inclined to think that the motor centres are absolutely confined to these areas, and that no other part of the cortex can be functionally substituted for them. The fact that motor paralysis of any group of muscles may occur without involving the muscular sense, and conversely that the latter may be affected in the absence of the former, led Nothnagel to endeavor to locate the muscular sense. This he has succeeded in doing in the parietal lobe, explaining that although lesions of the parietal cortex have been reported without any recorded loss of the muscular sense, yet the latter may be easily overlooked by the physician if not specially sought for. He calls attention to the fact, that the parietal lobe bears very much the same relation to the central and paracentral convolutions as does Broca's convolution to the cortical hypoglossal area.

Much more doubt still prevails as to the possibility of locating general sensation in particular parts of the cortex. Some hypæsthesia is generally associated with cortical motor paralysis, but there is no definite relation between the extent of the latter and of the former; indeed there may be hyperæsthesia and formication. This negative result may, however, be stated; lesions of the occipital and temporal, and of the greater part of the frontal lobes, do not appear to interfere with common sensation.

Pathology, according to Nothnagel, has little to say as to cortical lesions of the vaso-motor nerves, and as little about the results of lesions in the anterior part of the frontal lobes.

Professor Naunyn, of Königsberg, undertook the report on the localization of aphasia. He confirms the localization of motor or ataxic aphasia in Broca's convolution (posterior part of the 3rd frontal), but does not regard it as the most commonly occurring form. Of the sensory aphasias, attributable to the loss of memory for vocal and written signs (word-deafness and word-blindness), he locates the former with Wernicke in the posterior two-thirds of the superior temporo-sphenoidal convolution, and the latter in the angular gyrus where it passes into the occipital lobe (thus very near the centre for vision before referred to). In cases of aphasia not distinctly referable to one or other of the three categories named above, Naunyn found that either the island of Reil or the supramarginal gyrus were involved, an indirect affection of Broca's or Wernicke's centres (which are respectively contiguous to these areas) being thus indicated.

Nothnagel's report concludes with a discussion as to the nature of localization, and he arrives at the conclusion that the "centres" are meeting-places through which the efferent impulses (constituting a volition, *e.g.*) wherever generated, must pass before they reach the fibres of the internal capsule, and through which the afferent impulses must similarly pass before distribution to the rest of the cortex. He does not exclude the possibility of other functions beyond transference being ascribable to these limited areas, but regards the whole of the cortex as the seat of the higher conscious psychical processes. Finally he thinks the results hitherto obtained as to the wonderful mechanism of the cerebral cortex are such as to stimulate further