

“ pass one blade of a long pair of scissors up the infundibulum of the aorta, and divide where most convenient.” It must be confessed that this is the usual way ; but a much better plan is to open the right ventricle by an incision passing parallel to the septum, round the whole extent of the chamber ; in the left ventricle the first incision passes parallel to the anterior inter-ventricular groove, when, on separating the lips of this incision, the two papillary muscles are seen attached to the anterior and posterior walls of the chamber ; the knife should be inserted between these and a V portion of the wall cut, which has connected with it the anterior papillary muscle and all its chordæ ; while the posterior and its tendons remain with the piece of the ventricle attached to the septum. In this way a beautiful demonstration of the mitral orifice and segments is obtained, very much better than if the incision in the left ventricle is carried round the septum. Again, in opening the arterial orifices, it should never be where “ convenient,” but *always* between two semi-lunar valves. How often is a good specimen spoiled by carelessly slitting up the aortic orifice ; whereas in almost all cases, with a little care, the knife or blade of the scissors can be inserted between the valves, any lesions of which are thus unmolested.

In dissecting the abdominal viscera, the stomach, duodenum, and liver should in all cases be removed together, so as not to disturb the region of the gastro-hepatic omentum, and to permit of a careful inspection of the structures contained in it. A few additional explanations as to the technical details in the removal and inspection of organs would enhance the value of a second edition.

“ As an index to point out what is likely to be found, and to help in arranging the fresh facts which are certain to be observed at every necroscopy,” this little work will prove of value to the student, and as such we can cordially recommend it.

Cyclopædia of the Practice of Medicine. Vol. XIV.: Diseases of the Nervous System and Disturbances of Speech. By Professors A. EULENBERG, NOTHNAGEL, H. VON ZIEMSEN, JOLLY, KUSSMAUL, and DR. J. BAUER.

In our last number we noticed the first part of this volume. Kussmaul's most erudite, original, and elaborate treatise on Disturbances of Speech is so complete in itself,

that we prefer to notice it separately. We confess, however, that the epitome of his views which we proposed to make for our readers we have found simply impossible. The whole is so compact, and hangs so closely together, that it defies satisfactory abbreviation.

Beginning by an enquiry as to what articulate speech is, he describes it as a movement of expression, and more specifically by what is clumsily translated as "an acquired reflex," as opposed to the "congenital reflexes," which require no teaching, and include laughing, weeping, &c. He inclines to the "bow wow" theory of language. He then enters into a philosophical disquisition on the origin of intelligent speech, and in regard to its being the agent of intelligent cognition, and the relative interdependence of conceptions and words. He agrees that deaf mutes without instruction hardly rise above the level of animals as regards reason and feeling, and adduces the well-known example of Laura Bridgeman that speech, or some equivalent, in some form is indispensable for intelligent cognition. He thus describes the speech apparatus—"For the purposes of speech there exists an apparatus as vast as it is complicated, consisting of nervous tracts and ganglionic centres, which partly occupy the position of the loftiest workshops of the conscious intelligence and the will, and are partly reflex agencies in which simple and ordered sensory stimuli are converted into motion. Such a thing as a simple '*centre of language,*' or '*seat of speech,*' does not exist in the brain, any more than a '*seat of the soul*' is a simple centre." He entirely agrees with Laycock in his most original article in this Journal (July, 1875) as to the principle of memory, and its organic and ancestral laws, distinguishing between ancestral, sensory, cerebral, and intellectual memory. We do not think he dwells sufficiently on the process by which reminiscences of all kinds are *fixed*, viz., the faculty of attention, which is certainly a motor act. He gives an account of the mode in which articulate speech begins and becomes perfected in a child, which is far from being as good, because not so true to nature, as the careful studies of C. Darwin* and M. Taine; and he shows that, though hearing cannot be said to be the only primary reflex source of speech sounds, yet it is their indispensable regulator, but that the full development of the intelligence and the

* See "Mind" for April and July, 1877.

acquisition of a language involving ideas, are always dependant also ~~on the sense of touch and~~ the muscular sense. He inclines to the view that acoustic sound reflexes are not simple reflex acts, but must take place through the cerebrum. He calls the reflex centres of non-articulate cries the "basalphonic centres," and places them below the corpora quadrigemina, their lower limit in the cord coinciding with that of the respiratory centre. He shows that the integrity of literal phonation is bound up with the integrity of the motor nuclei in the medulla oblongata; while the formation of syllables and words takes place in the cortical substance itself. He enters into a most elaborate analysis of the evidence as to the channels through which the speech impulses pass upwards from the lower phonic centre to the cortex cerebri, and concludes that we know "scarcely anything" about the "exact course of the motor fibres" in the intermediate region. In regard to the corpora striata he can only conclude that they are the "uppermost limit" of that region within which destruction of the cerebral tissue causes only slow stammering, or abolished speech from destruction of the mere "mechanism" of "literal phonation," and that we have no certain knowledge of the place whence the motor fibres subservient to speech enter the cortical convolutions, though we know that lesions of the white substance alone near the third frontal convolution may "disturb the power of forming words." "The great task of the future to unravel the tangled paths of feeling, thought, will, and action, makes us feel giddy with our present inadequate power of insight." This is emphatically our own state of mind in regard to Kussmaul's meaning, when he digresses (p. 694) into metaphysical speculation, and attempts apparently to set up—not unconscious thought, or cerebration, or action of any kind, but an unconscious consciousness—a consciousness not "personal" or within the "field of vision of the ego." The next chapter on localisation of formation in the cortex cerebri is careful, but in no respects original. He marshals the evidence as to the special connection of the third left frontal convolution and the neighbouring region of the brain with the function of speech, and decides that undoubtedly there is a special but not exclusive connection. He thinks that there is in the cortex a rather extensive though limited speech tract, in which tract the third frontal convolution has a special importance. He divides cortical

derangements of speech into two kinds, viz., dysphasic and dyslogic, and he tries to distinguish in a more scientific and accurate way than has yet been done the different speech symptoms that have been comprised under the term aphasia. He objects to the terms ataxic and amnesic aphasia as not expressing accurately the meaning attached to them. He concludes that the centres for spoken and written words are distinct. The next part of the article is so full of speech subtleties, so illustrated by cases and references to literature, that in the short space at our disposal we could not possibly do justice to it. Everyone who in future wishes to know all that was known about the physiology or pathology of speech in 1878 will refer to Kussmaul's work.

Die Geistesstörungen der Schwangeren. Wöchnerinnen und Säugenden. A Monograph, by Dr. RIPPING, Superintendent of the Rhenish Provincial Asylum in Siegburg. Stuttgart, 1877.

After an historical review of the literature of his subject, Dr. Ripping proceeds to give us the results of his experience of 168 cases of psychoses of pregnancy, childbed and lactation, extending over a period of four years.

He finds that the proportion of these cases to the sum of female mental disorders varies from 7 (Rush) to 21.6 per cent. (Ripping). This wide difference he accounts for on two grounds—(1) Fifty years ago, when Rush drew up his statistics, women were much less frequently treated in an asylum than now, and (2) the low average constitution of the women in the district of his (Ripping's) asylum—especially in the Düsseldorf district, which is so devoted to manufacture and coal-mining.

In his second section he asserts, in opposition to J. Thompson Dickson ("Journ. Ment. Science," vi., 380), that heredity does not play a greater part in the forms of disease under discussion than in other forms. To prove this he adduces a percentage of 41.6 of all females admitted to Siegburg Asylum, in which heredity could be traced, and comparing this with his puerperal cases, finds the influence of heredity in 71 cases out of his 168—i.e. in 44.2 per cent., only giving a balance of 2.6 in favour of Dickson's view. Besides this he points out the fact of the regular recurrence of mental disorders at the puerperal period. The influence of preg-