5. Dutch Retrospect.

By Dr. J. PIETERSEN.

The Influence of Music on Mental Disorders.

At the quarterly meeting of the Dutch Psychological Society, held at Utrecht on November 27th last, Dr. van Deventer opened a discussion on the above topic. He reviewed the position held by music among the ancients, and cited numerous classical authorities who have made mention of its curative influence in bodily and mental disease. Following such quotations he brings us to the days of Pinel and Esquirol, who made special investigations with this agent in the treatment of mental aberrations. Their immediate successors appear to have over-estimated its influence and over-strained its use, for by some it was even regarded as the only psychical specific; theories were freely promulgated by which the nature of mental disturbances and the favourable influence of music on such were to be explained, while a connection was demonstrated between mental operations and musical sounds. In their experiments and mode of treatment eminent musicians lent their aid and guidance, but in many cases with anything but a gratifying result to the patient; with the laudable aim of curing the sufferer, but frequently against his will and inclination, they would, for days in succession, have the finest musical masterpieces performed in some adjacent apartment, the consequence being that the condition of some of the patients was frequently aggravated rather than improved, and that extreme mental exaltation even supervened at times. The measures adopted by Esquirol in 1824 and 1825 had been more systematic, he first tried the effect on selected patients, and subsequently on a large assemblage of insane, chosen mainly from convalescents, quiet maniacs, and some melancholiacs, and under the personal supervision of himself and his medical staff at the Salpêtrière. His observations led him to advise that with the insane the musicians should be always placed out of sight, that the number of instruments should be limited to a few, and that a process of selection should always be adopted, a proper estimate being taken of the mental condition of each patient; the preference was to be given to musical pieces which prior to his malady had proved agreeable to the patient, and such especially as brought to his mind the memories of his youth. Notwithstanding these precautionary measures its influence would be undetermined and doubtful so long as the affection itself was active; improvement in such cases was rare and cure never resulted. Some patients, among whom were musical adepts, declared that harmonies were discordant or terrible to their ears, and even the most capable of these became irritable and excited on hearing what to the normal ear were XXXVII.

pleasant melodies. In the period of convalescence, however, music would be found of value if precautions were taken against undue excitation of the imagination and an excessive rousing of the passions. From this we gather that music is by no means to be regarded as a harmless form of mental treatment; the factors that come into play are numerous and varied, the use of vocal, instrumental, or concerted music, the instrumentation, the tone, musical colour, rhythm, subject, harmony, and delivery, the duration, associations, and meaning of the subjects performed, the time of life and individuality of the hearer, his social status and mental culture and development, and his morbid leanings and disposition all have to be studied. The same music too will have different effects on different psychic states. Primarily it must be urged that in all acute mental conditions music is directly contraindicated, bodily and mental rest being here of the first considera-In melancholiacs in this stage the condition of listless apathy is thereby much increased, and sometimes agitated excitement may result, the patient feeling acutely the antithesis between his feelings and his surroundings. Some patients who perform on some sort of instrument take refuge therein in an attempt to banish their feeling of desolation, or, roused thereto by their surroundings, endeavour to instil some cheerfulness into their depressed spirits, or to divert their thoughts. In the more chronic forms, as well as during the period of reversion to mental health, it frequently serves a beneficial purpose, acting favourably by inducing natural sleep; a favourite melody may thus at times exercise an extremely salutary effect even in cases in which for a lengthened period no hopeful symptoms have been observed. During such a performance of music, unmistakable signs of emotion manifest themselves, and the patient begins to show interest in his surroundings, and the first symptoms of improvement appear, he becomes more cheerful, and shows a mental comprehension of what was previously unintelligible to him. In acute mania its application during this stage simply increases the unbridled excitability, though frequently the attempt is made to manage such patients or occupy them by pianoforte playing; they will often demonstrate by their performances the boisterous turbulence of their mental states. In chronic mania music is frequently of service to inure the patient to an orderly and regulated form of life, and thus to bring him back within the pale of social conduct from which his malady may have caused him to On the other hand, during the return from mania to mental health, a patient will show himself to be extremely sensitive to music, and relapses may occur if such a form of recreation or employment be too readily adopted. In moral insanity, at least in the more expressed forms, it appears to produce no effect, and the patient seems to remain uninfluenced. In those cases of moral insanity in which the condition is the outcome

of education and environment, music will be found to exercise an excellent influence, and it may, therefore, be regarded as of some value as a differential diagnostic of the cause of the malady.

In very young children, and especially those inheriting a neurotic tendency, its employment must be adopted with great caution. Marion relates the case of a child some six months old, who, already excited by the playing of her nurse, evinced unmistakable signs of deep emotional agitation on suddenly hearing the Marseillaise sung by someone near her. In neurasthenia, especially in cases of organic hypersensitiveness, music by inducing functional irregularities acts prejudicially, subsequent tinnitus in the shape of musical sounds, auditory pain, unpleasant sensory disturbances, mental anxiety and confusion, convulsive seizures, unconsciousness, etc., may supervene, while in particular instances, the subjects of chlorosis or cardiac disease, the afterresult may be most serious. He instances one of his own cases, a neurastheniac suffering from heart disease, who at the sound of distant music would for some time subsequently be subject to auditory hallucinations. As a rule this class of patients has an idiosyncrasy for particular sounds, so that the throbbing noise of a steam engine or the tinkle of a tramway bell becomes extremely painful to them, though they can frequent concerts with pleasure and without deleterious results. With some again it is exactly the opposite. They cannot endure the sound of reed music, while to others that of string music, and especially the upper notes of the violin, are distressing and unbearable. As an indication of the age it has been observed that a large number of neurotics are passionate lovers of Wagnerian music; here the sensuality and pessimistic views of the day find a ready echo in the characteristic elements of the music with its voluptuous expression and power over the passions. At the end of a busy and toilsome day it will act as a stimulant to these subjects, engendering a spurious mental revivification, and it is for the very reason that by its influence unpleasant sensations are temporarily put aside only subsequently to return with greater intensity, that we must regard it as a dangerous stimulant. In the acute stages of delusional and impulsive insanity the use of music is generally to be deprecated. It should, of course, be omitted wherever, by its means, a delusion is strengthened or an impulsive feature encouraged, and still such sufferers are frequently literally tormented and harassed by the misdirected but well-meaning zeal of those who flood them with music so as perchance to draw their thoughts away from contemplation of self. Sometimes by musical influence sensory delusions are aroused, and especially in those forms of alcoholic insanity in which hallucinatory disturbances are easily evoked. For the rest we may regard music as a valuable agent in particular affections to employ the patient, to lead his thoughts into definite channels, to improve his disposition and to control his will.

Orchestral music, especially under good and proper management, comes into prominence in fostering a mutual kindliness of disposition, provoking a friendly co-operation and an interest in the patient's surroundings, and furthering the progress towards a better social bearing; bad habits, too, are by its means eradicated. The high value of music as an educational means among idiots is well-known. In compound psychoses such as general paralysis of the insane, epileptic and hysterical insanity, etc., one cannot lay down any fixed rules for guidance, as the effects are by no means constant, but in hysteria the patient so frequently gives expression to the abnormal feelings aroused in him by the playing of some instrument, that music should in such cases be expressly discountenanced. In all cases circumspection must always be exercised. At first we must limit ourselves to the performance of a single simple melody, taking precaution against exaggeration or excess, giving especial preference to concerted music, avoiding all harmonies which have a moving effect on the feelings, which give expression to the existing morbid conditions, which lead the imagination into unhealthy channels, or which by their nature have a fatiguing effect on the mind.

The Use of Opium in Melancholic States.

In the "Psychiatrische Bladen," Deel viii., Afl. 4, Dr. Tellegen discusses the value of opium in melancholia, and reviews the opinions of some of the most prominent alienists of the day on this subject. Ball sums up his experience in these words: "Except in cases of insomnia, in which the liquid extract of opium may prove beneficial, opium preparations and salts of morphine are to be excluded in the treatment of melancholia; they seem, instead of quieting the mental perturbation, rather to induce an opposite effect." Voisin, on the other hand, remarks: "Treatment with morphine generally cures melancholia, whether this is accompanied by delusional states or not, and especially when the condition of dejection is associated with anemia; the symptomatic phenomena of mental depression, stupor, ecstasy, inclination towards suicide, religious or mystic delusions, disappear altogether with morphine and usually within a comparatively short time. The melancholic terror, too, fades with equal rapidity." Clouston puts no faith in opium; in his observations, he found loss of appetite and diminution in body weight to follow its use, and he only records one case in which it did good service. Mickle is of the same opinion. Blandford, however, to take an opposite view, has found the preparations of opium serviceable in subacute melancholia, whether given by the mouth or subcutaneously; in acute melancholia he advocates its use, not only as a soporific, but also as a brain stimulant and nourisher; in melancholia with stupor he also recommends it. Brosius declares against it, while Schüle as warmly defends its use. Kovalevsky

considers that there are many hypnotics for use in melancholia less deleterious in their action on the organism than opium; his experience is that more harm than good is done by it, and that patients recover more speedily without it. Guislain, who at first found no advantage from its use, has now come to the conclusion that in selected cases of melancholia and with proper dosage it may be beneficial; he prefers morphine to other opium preparations. With Engelken, he thinks that it is extremely serviceable in recent cases of melancholia, though it does not always bring about a cure, and its application must frequently be temporarily suspended if the condition of the patient is not to be aggravated; opiates act beneficially also in those mental disorders, which are accompanied by an extreme mental sensitiveness, and in which the patient is always harping on his own miserable condition, as well as in those in which the emotional disturbances are prominent without marked intellectual declination. Others who employ opium mainly as a symptomatic remedy, and who do not regard it as having a direct influence on the course of melancholia, speak highly of it as a serviceable agent in the coincident symptoms of the psychosis, e.g., the inclination to suicide, insomnia, and the conditions of mental anguish. Tigges is of opinion that so long as melancholiacs are treated with opium, suicidal cravings are less marked, and that no drug acts so beneficially in the insomnia of melancholia as morphine; while, in the conditions of mental anguish, Kraepelin advocates the use of opium in gradually increasing doses. Most alienists are of opinion that in so-called symptomatic melancholia, e.g., the melancholia preceding maniacal attacks, the melancholia of insanity of persecution, as well as in that of general paralysis of the insane and circular insanity, no favourable result is to be anticipated from its use. The following considerations are the result of the author's own experience, coupled with a careful review of the literature of the subject:—1. Many cases of melancholia, in fact the larger number, recover without the use of any therapeutical measures, by restorative nutritional treatment, change of surroundings, and mental and bodily rest. 2. It is neither probable nor possible that opium can always be of use in cases of melancholia; we must carefully watch its effect and at the first signs of unfavourable influence cease its administration. There are many individuals who show a certain idiosyncrasy towards opium, and on whom it acts as an excitant and sleep destroyer. 3. It is not to be denied that, owing to the recent introduction of other soporifics, opium need less frequently be employed as a hypnotic, though it must still be considered of great value as such in melancholia. 4. It is in private practice that opium will be found most useful and reliable in treating melancholic conditions. There is no class of the insane who are more acutely sensitive to their environment, and who, after their recovery, look back with more dread and distress on their asylum

experiences than melancholiacs, and when treatment at home or in some other private surroundings is possible, medical men shrink from consigning their patients to such institutions; it is only when continued insomnia, wearying both to the patient and his friends, the leaning towards suicide, and refusal of food complicate the case that asylum treatment is, as a rule, advocated. Now it is just in these three conditions that opium will be found of inestimable value: it will induce sleep, create a blunting to the suicidal inclination, and diminish the mental tension, so that the patient is less disposed to oppose the administration of suitable food. 5. With Schüle and Guislain, he believes that opium can, in some cases, shorten the duration of the affection, exercising a specific influence such as is also possessed by the bromides. administration must, in preference, only be resorted to when the malady has lost its power, and has, as it were, expended itself; this can only be judged of by trial doses with the drug. Longcontinued employment of opiates he deprecates as injurious (Ziehen, on the contrary, puts his patients for months, in some cases a whole year, under an opium course). 6. Experience teaches that opium acts better in anæmic than in hyperæmic conditions, and he agrees with Savage that it is less favourable in its action in young persons than in elderly ones and those in whom the climacteric change is exerting a morbid influence. 7. As to its influence on melancholia with stupor, authorities are not agreed. Krafft-Ebing considers it to be contra-indicated, whereas Blandford and Ziehen advocate its employment.

In conclusion, he advises that the earlier administrations should be by subcutaneous injection of morphia, commencing with small doses. Later, when given by the mouth, the dosage is to be slowly or rapidly increased, according to the effects on the patient, and it is best given twice or three times a day, the first dose early in the morning, the second and third two hours before and at bedtime. By this means the digestive functions will not be disturbed, and food may be regularly administered during the day, a matter which is, undoubtedly, of the first importance in melancholia.

6. Swiss Retrospect.

Histological Technique of the Central Nervous System.

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(Continued from p. 481.)

Method of Staining Axis-Cylinders and Cells in a Continuous Series of Sections.

For this purpose the pieces must be imbedded in the microtome of Gudden and cut under water. This microtome has the advantages of easy manipulation and accuracy of working. The sections may be made of equal or varying