volution and manic-depressive insanity, but here they infect the entire psychic personality and interfere with mental life in all directions.

There are usually no prodromal symptoms, although the patients may have already given evidence of their psychopathic constitution, by the previous existence of either hysterical symptoms or congenital neurasthenia. The first symptoms very often appear during puberty. Later, they may follow some emotional shock or exhausting disease, lactation or sexual excesses.

The compulsive idea at the onset may be of the simplest sort, recurring spontaneously and unaccompanied by any emotions. The occasional morbid persistence of an idea in a normal individual, such as a popular air, which continues to run through his mind to his great annoyance, would represent ideas of this type. In the patient, on the other hand, in spite of all efforts of the will to dispel them, the ideas persist with morbid intensity, and interfere with the train of thought. At first the patient may be annoyed only by the constant repetition of these ideas. Sooner or later the compulsive ideas take on a specific form, such as the compulsion to ponder over names, the fear of definite objects, etc. The immediate cause of these concrete compulsive ideas can rarely be determined, though sometimes their origin can be traced to something heard or read.

The variety of compulsive ideas is limited only by ideation itself, which fact accounts for the invention of a great many names for the different forms of compulsive insanity in which some one idea has been the most prominent. In general, they may be divided into two large groups; the compulsive ideas manifesting indecision and doubt and those characterized by fear—the phobias.

In the former class, called Grübelsucht by Westphal and by the French maladie du doute, the patients are disturbed by doubts and indecisions of all sorts. Some are troubled by such ideas as, "Who is God?" "Is there really a devil?" "Why is this tree planted here and that house situated there?" Others ponder over the names of persons whom they have met, or the countenance and color of eyes or hair of strangers whom they have passed on the street. Such thoughts busy them much of the time. If there is difficulty in recalling the name, the color of the hair, etc., every nerve may be strained, business abandoned, and sleepless hours devoted to the task, and there is no relief until their efforts are successful. Still others enumerate objects in their environment, the number of the flags in the pavement, the number of trees along the street, the number of spoons on the table, etc. A patient who came to consult Legrande du Saulle cried out upon departing: "You have forty books on your table and wear a waistcoat with seven buttons. Excuse me, it is involuntary. I have to count."

Some compulsive ideas are more trivial and create less doubt; for instance, some are compelled to contemplate the sexual organs of those about them, but ideas of a very simple sort may in time so thoroughly engross the thoughts of the patients that they are unfit for any duty. M. Ball describes the case of an intelligent student who, after hearing some companions talk about the mysterious fatality connected with the number thirteen, thought how deplorable it would be if God should be thirteen. At first he attached no importance to this absurd conception, but he could not prevent himself thinking of it continually and saying to himself, "God thirteen." This later was extended to "eternity thirteen," and then "the infinite thirteen." The constant repetition of these finally made study impossible, and shortly he was forced to give up all employment and was permanently relegated to a life of uselessness.

In the compulsive ideas of fear, the fears may arise in reference to objects, to places, diseases, etc. Perhaps the best known of these fears is the fear of places (agoraphobia), in which it seems impossible for the patient to be alone on the street or in a broad space, or again in a narrow space, as a small room. Hammond reports the case of a man who would not go into the street unless he went in a carriage and while in passing from the vehicle to the door of the house, he required the support of two men. In his apartments at his hotel he walked freely and would go up and down stairs without difficulty. As soon, however, as he found himself on the doorstep his terrors began. It seemed to him that everything was in motion, and it would be impossible for him to live another minute unless assistance were given him. At the same time, his brain appeared to be in motion within his skull, a cold sweat broke out over his body, his heart palpitated violently, his arms and legs trembled with fear, and every now and then a severe spasm would seize him.

Other patients fear being alone (monophobia). In a case of my own of this kind the patient at first developed the fear of being alone, accompanied by all the characteristic physical discomforts, and for one year required the constant attendance of one of her daughters. Later she developed the fear of finding pins and pricking herself, which necessitated her relinquishing a part of her household duties. In washing dishes, she had the constant fear that pins might be in the dish-water. This increased until she feared placing pins in food, and this with the fear of poisoning food absolutely prevented her from doing any work in the kitchen. In addition, she developed the fear of turning on the gas unlighted, and this in turn prevented her from passing through any room where there was a gas jet within reach.

Some patients fear height and cannot stand near the edge of a tall building, cross high bridges, or attend theatres. Others fear dark places, cannot pass through tunnels, or enter dark passageways. These patients take no pleasure in travelling, remain away from the theatre or always sit near the door, ready to fly at the first sign of danger. Some patients fear embarrassment or blushing in the presence of others, which may be so extreme as to prevent social intercourse altogether. Fear may arise upon donning new clothes, accompanied by a feeling of great discomfort, which may prevent patients from ever wearing new garments.

The fear of dirt, contagion, or infection is also a prominent form of compulsive insanity (mysophobia). The countless bacteria constantly present in the air are one of the chief sources of annoyance, compelling patients to handle everything with gloves or to wash themselves and their clothing continually. Hammond mentions a young woman who was shocked by an accidental infection with lice and from that time insisted upon repeated washing of her head with disinfectants. From this as a starting-point, little by little the idea became rooted that she could not escape sources of contamination and that others might defile her. So scrupulous did she become, especially in regard to children, that she would not allow a child to touch or even approach her closely. In the streets she carefully gathered her skirts about her upon passing any one. Each day hours were spent in scrutinizing and cleansing her combs and brushes, and she was known by actual count to wash her hands two hundred times daily. Fear of contamination of the soap compelled her to rinse her hands in pure water, and then the fear of the towel necessitated her letting her hands dry without wiping. In removing her clothing at night she avoided touching it, because she could not have an opportunity of cleansing her hands, so she had some one loosen it and allowed it to drop off.

Books and money are special sources of contagion. Some patients are always afraid of throwing away something of value, and for this reason spend much time in looking over papers and other objects before casting them aside. Such fear may even prevent patients touching anything of value. Others have fear of not doing things correctly, and so are always turning back to see if they securely fastened the door, tearing open letters to see that they enclosed the correct one, or following up friends with whom they have been conversing to insure themselves that they have been understood.

Compulsive ideas and fears are regularly accompanied by various physical symptoms, such as palpitation of the heart, nausea, faintness, pallor, trembling, cold sweat,

polyuria, weakness of the legs, and finally the patients may even lose control of themselves and collapse completely.

Consciousness remains unclouded and there is no tendency toward intellectual deterioration. The intellect may even be unusually good. The patients always possess insight into their unfortunate condition, and the desire, but not the strength, to free themselves from it. Compulsive ideas are usually accompanied by states of lively emotional excitement and as already seen lead to compulsory acts, whose accomplishment is usually followed by a feeling of great relief. In behavior the patients often show nothing abnormal and control themselves perfectly in the presence of strangers.

In the milder forms of the disease the compulsive ideas and fears involve only one field of activity, but in the severer forms every action of the patient is influenced. Doubts are constantly arising as to whether something was properly done, which leads to an ever-increasing painstaking in all the little details of daily life. The whole life becomes one continual round of trouble, anxiety, and fear. The course of the disease varies much. Remissions are common, but the symptoms seldom disappear entirely. Rapid improvement is often noticed. The symptoms often occur in crises. The treatment of compulsive and impulsive insanities are given together under the latter disease.

Impulsive Insanity.—Morbid impulses are regarded by many as only one of the episodal symptoms of degeneracy either allied to or forming a part of compulsive insanity; but according to Kraepelin they are to be distinguished from compulsive ideas in that they appear suddenly, are executed rapidly without the least effort toward resistance, and are regarded as the natural expressions of consciousness at that moment. They do not appear gradually, but are instantaneous, simulating an epileptic equivalent except that there is no clouding of consciousness. These impulses appear without cause, are motiveless, and perpetrated against the ideas and wishes of the patient. In compulsive insanity the patient recognizes beforehand the morbidity of the act and has a chance to resist it, while a feeling of anxiety accompanies the act whose performance brings a sense of relief. In impulsive insanity the act is not accompanied by a feeling of relief, but rather by a feeling of great remorse. Morbid impulses occasionally appear in normal life, when they are usually of a very simple type and occasion no anxiety to the patient; but when they recur constantly, involve the environment and interfere with employment, they indicate a morbid condition of the mental life.

Morbid impulses may assume almost any character, varying from an impulse to touch a certain tree to an impulse to commit murder. However, in individual cases the impulses are usually of a specific character. This tendency to involve only some one action has given rise to several different forms of impulsive insanity, such as the impulse to burn things (pyromania). The best known forms of impulsive insanity besides pyromania are: the impulse to steal (kleptomania), the impulse to drink (dipsomania), the impulse to commit suicide (suicidal mania), and the impulse to kill (homicidal mania).

Pyromania occurs mostly in women, particularly during the age of puberty, for which reason it has been suggested that it may depend upon an irregular development of the sexual functions. A tendency to irascibility and moroseness in the patients has been noted. Cases of true pyromania are rare.

Kleptomania also occurs most frequently among women, particularly during puberty and the climacterium. It is a notable fact that the stolen articles are often useless to the patient, or quite insignificant and sometimes some one article is accumulated in large quantities. Hammond reports that a patient suffering from kleptomania came to him for consultation, and during her visit stole several books, which she returned several days later with an excuse for her act.

In dipsomania, which according to Kraepelin should be regarded as an epileptic state, there arises, after a few days of insomnia, anorexia, etc., an irresistible impulse to drink and indulge in other excesses. In spite of their lucidity, the patients drop everything in a "mad rush" for drink, which is unsatiated until all money is gone and even clothes from their backs are sold to obtain liquor. Not alone alcohol, but anything strong and intoxicating is imbibed, even to drugs and poisons. These attacks, which rarely last over a couple of weeks, are followed by a short depression and a feeling of remorse. They occur only at irregular intervals and between the attacks the patients are not only temperate but may even display an extreme distaste for liquors.

Homicidal mania and suicidal mania differ from the other forms in that both often exist in the same individual. Suicidal mania, in which the impulse is sudden and unpremeditated, must not be confounded with the attempts to take one's life as the result of sorrow or misfortune and after a more or less logical course of reasoning. The act may be traced to the sight or the description of a suicide. The hereditary transmission of suicidal impulses is not uncommon. It is not at all unusual that one of the parents of the patient should have similar impulses and even at the same time of life. Several cases have been reported in which whole families have been afflicted.

In homicidal mania there is an irresistible impulse to kill some one without motive. Fortunately such impulses are rare. According to the views of some writers they never exist independently of a psychosis, in which there are other evidences of insanity, but that they really do has been established beyond a doubt by Hammond and others. Sometimes these impulses arise at the sight of a weapon or a helpless creature. Probably the perpetrators of the Whitehall and similar crimes were individuals suffering from such morbid impulses.

These impulses which occur in impulsive insanity should not be confounded with those accompanying compulsive ideas in which the patient, realizing the enormity of the crime, struggles to overcome the impulse, rushes away from his victim, or throws aside the weapon. A case of this sort is reported by Hammond, in which the patient for months had the compulsive idea to stab his niece with a pitchfork, which at first he was able to overcome. It, however, continued to appear, and each time he approached nearer and nearer his object until he felt that he could no longer resist and so hurried away to the physician for aid. Such impulses are often associated with sexual impulses, indeed they seem to bear a close relation to those morbid sexual impulses which impel patients to snip women's hair, slash dresses, steal women's apparel, etc.

According to many, impulsive insanity should also include the morbid sexual impulses called masochism, sadism, and fetischism, which have been so thoroughly studied by Krafft-Ebing and Schrenk-Notzing, but which the author is unable to discuss here because of limited space.

The intellect of the patients is usually unimpaired, and may even be above the average, but a few cases are accompanied by some mental defect. The patients usually express a keen insight into their deplorable condition and often warn those about them of their weakness. There are often defects in other fields of the psychic life indicative of degeneracy, such as neuroses, hysterical symptoms, etc.

The symptoms of the disease appear mostly during puberty and the climacterium, at which times there is usually diminished power of resistance, both mental and physical. Occasionally periodicity is noticed. Marked improvement often accompanies the development of manhood and the establishment of a stable personality.

The treatment of compulsive and impulsive insanities is limited to physical and mental training and to suggestion. During development, if any of the milder symptoms of degeneracy become apparent, careful attention should be paid to physical training. Later the individual symptoms should be combated by patient and persistent training with a view toward strengthening self-confi-

dence. The significance of the illness should always be made clear to the patients and they should be impressed with the fact that they will overcome it more by abstraction and diversion than by the exercise of will power. The symptoms always tend to become aggravated during periods of physical ill-health, accompanied by debility, anæmia, etc. At such times improvement follows the use of iron, phosphates, arsenic, strychnine, or other alteratives. Removal from home environment to hospital surroundings with its strict regimen often ameliorates the symptoms. Massage and electricity are useful adjuvants in improving the physical and mental tone. The value of suggestion and hypnotism is questioned by some who hold that the disease is absolutely incurable. There is, however, no doubt that suggestion is of value in those cases occurring in acquired neurasthenia or during convalescence from acute diseases in which degeneracy is not so prominent a factor. Finally, the patients must be warned against the use of alcohol, to which they seem to be especially susceptible.

Contrary Sexual Instincts.—This form of the insanity of degeneracy, which received its name from Westphal and since has been exhaustively described by Krafft-Ebing, Moll, and Schrenk-Notzing, is characterized by the exhibition of sexual feelings by persons of the same sex for each other and an indifference or an absence of sexual feelings toward the opposite sex.

This morbid condition is not frequently encountered, although the patients themselves assert that it is by no means uncommon. Ulrichs in his own morbid experience claims to have encountered two hundred cases, while one of Krafft-Ebing's patients states that he knew of one hundred and twenty individuals in a town of thirty thousand population, and eighteen and eight in towns respectively of seven thousand and two thousand three hundred. It is more prevalent among theatrical people, especially women comedians, ladies' tailors, and decorators. While Krafft-Ebing claims that this peculiar perversion of the sexual impulse is congenital, it is more probable that the characteristic tendency only is hereditary.

According to Krafft-Ebing the disease occurs in one of two forms, the acquired or the congenital, each of which differs somewhat in mode of onset, character of symptoms, and prognosis. In the acquired form patients early develop marked sexual feelings, which at first are purely hetero-sexual. Later, either spontaneously or as the result of some accidental injurious influence, especially masturbation, homo-sexual feelings appear. These are usually recognized by the patient as morbid and an effort is made to suppress them. In the mildest form there may be a simple reversal of sexual feelings, which, however, remain characteristic of the sex of the patient. If this condition is permitted to develop a permanent transformation of the psychic personality results, in which the feelings change to those of the opposite sex; *i.e.*, the man has the sexual feelings characteristic of the female sex and during sexual intercourse desires only to be the passive agent. The change may go still further when even the physique becomes characteristically feminine; and finally in a few cases the patient may come to believe himself one of the opposite sex, exhibiting a change of personality similar to that encountered in paranoia.

In congenital homosexuality, on the other hand, the perversion of the sexual instinct exists from the first. In the mildest type, psychic hermaphroditism, there are alongside of the homosexual feelings natural sexual feelings for the opposite sex, but these are much weaker and are manifested only periodically. As in the acquired homosexuality the contrary sexual instincts may involve only the sexual life, not affecting the personality of the individual.

In the more marked cases, called "urnings," there exists a total absence of feeling toward and even an abhorrence for the opposite sex, and there is a change of personality similar to that occurring in the acquired forms. Close attachment usually arises between the patient and some one of the same sex, which develops into a passionate friendship with an extravagant display of affection, kisses, embraces, etc., letter writing, gifts, flowers, and exhibitions of jealousy, sometimes even leading to masturbation or other forms of sexual perversion. Such relations may be maintained for years, although changes of affection are more usual. Both individuals are usually homosexual. In some instances the patient is attracted by the mental or physical superiority of the other individual. The question of social inequality is usually disregarded and many are attracted by machinists and especially by soldiers.

All these patients experience pleasurable sexual feelings only toward their own sex. It usually begins with a mere perversion of the sexual feelings; patients feel an inclination toward individuals of the same sex, are attracted by persons of fine physique, desire to be in their presence, and experience a pleasurable feeling if allowed to touch them. Such feelings may exist a long time before perverted sexual indulgence begins. This may occur as the result of seduction. At this time masturbation is often present. Normal heterosexual intercourse, except in the cases of psychic hermaphroditism, becomes distasteful, difficult, and finally impossible. There are, however, many patients, especially among the acquired cases, who, inspired by the desire for a family, marry and successfully perform marital relations, although with difficulty. Such patients succeed in sexual intercourse only by the aid of imagination, perhaps picturing themselves in the embrace of some one of their own sex.

There are often present other evidences of degeneracy, such as an increased sense of fatigue and lack of perseverance with mental work, or neurasthenia, hysteria, or epileptoid states. The imaginative powers of the patients are usually increased and there is often a marked tendency to dream. The intellect is unimpaired except in a few cases. On the other hand, many patients are gifted, but always show a keen sense of appreciation of their own abilities. Emotionally, the patients are apt to be sensitive, irritable, moody, and impressionable, often timid and given to passionate outbursts.

The conduct of these patients is characteristic. The men are effeminate, vain, unstable, distractible, careless, and untrustworthy. When the sexual tendencies are very pronounced, there may be a distinct change of personality; they are effeminate in manner, gait, and countenance; are coquettish, ultra-particular in their attire, try to be in fashion, wear flowers, use cosmetics, and arrange their rooms like a woman's boudoir. Some like to do needlework, others dress in women's attire, padding hips and breasts and affecting a falsetto voice. In extreme cases physical stigmata may accompany the condition; such as, an absence of beard, feminine voice, soft white skin, and well-developed mammæ. The women show a tendency to grow beards, possess deep voices, and in conduct affect in every possible way mannish traits.

Contrary sexual instincts should not be confounded with the homosexuality as practised among prisoners, soldiers, and sailors who are deprived of the opportunity of enjoying normal sexual intercourse, but who always return to normal sexual relations upon regaining freedom, etc.

The treatment is more hopeful in acquired homosexuality, in which masturbation plays such an important part. Here, besides attempting to improve the general nervous condition, and the establishment of a routine in the physical and mental life, an effort should be made to dispel the homosexual feelings and impulses by means of hypnotic suggestion. This is first directed against the increased sexual excitability and masturbation, next against the insensibility of the patient toward his own sex, and a tendency to heterosexual intercourse. The hypnotic influence is acquired slowly. Among the congenital cases there is hope of recovery only when there is psychic hermaphroditism, as some normal sexual desires still remain. Only a few cases of recovery have been reported among urnings. Schrenk-Notzing lays great stress on regular and natural intercourse, but excessive coitus should be avoided.

Folie-à-deux.—Folie-à-deux is a broad term which has been applied to the occurrence of a mental disturbance in two or more individuals who have been intimately associated with each other.

The difference of opinion among alienists as to what true folie-à-deux constitutes has led to considerable contention, and even yet there is no uniformity of opinion.

Folie-à-deux was first alluded to by Baillarger, but its first accurate description was due to Laseque and Falret (1877), who stated that delusional ideas of one person might be transferred to another, sane individual, but it was necessary that the two should have been intimately associated and free from counterbalancing influences, and that the delusional ideas should present some degree of probability in order that they be accepted. They also noticed that the psychosis in the second individual did not run a typical course, but tended to disappear as soon as the two were separated. These characteristics still form the essential features in one of the three accepted forms of folie-à-deux, which is called imposed insanity of the Laseque-Falret type.

In 1880 Regis called attention to another form of folie-à-deux, simultaneous insanity, in which an identical psychosis, characterized usually by depression, with delusions of persecution, appeared simultaneously in two morbidly predisposed individuals. It was also necessary that the two persons should have been in intimate and persistent contact with each other, and that the psychosis appear directly following accidental causes, usually of a depressive nature. The absence of evidence of mental contagion in the transmission of the psychosis from one person to the other in this form deterred many from accepting it as a form of folie-à-deux. The appearance of the psychosis either simultaneously, or almost so, in twins, described by Ball (1884) and called folie gémellaire, has also been considered a form of simultaneous insanity. In this form the possibility of contagion is even more remote, as the patients may be at a distance from each other at the time of the onset of the psychosis.

Still a third form was indicted by Maradon de Montyel (1881), called communicated insanity. In this form, which differs from the type of Laseque and Falret by the evidence of mental contagion, the second individual accepts the delusional ideas of the first only after prolonged resistance, and the psychosis persists in the second even after the two have been separated. Schoenfeld (1894) would still further limit communicated insanity, under the name of induced insanity, using the term only in those cases in which the psychosis in the first individual is not only the specific cause of the psychosis in the second, but the psychosis in the second should continue to develop independently, present a typical disease picture, even after the two individuals have been separated.

The term folie-à-deux is still in general use, being applied in a broad sense to these three different groups of cases; namely, the imposed insanity of Laseque and Falret, simultaneous insanity of Regis, and communicated or induced insanity. To some authors the first and third groups seem to differ only in the degree of the intensity of the transmission. In imposed insanity, the patient upon whom the insanity is imposed offers but little resistance to the ideas presented by the patient originally insane, and it frequently happens that the morbid influence does not progress even far enough to render the second person really insane. In communicated insanity the second patient offers much resistance and does not really succumb until after a long struggle. Here, furthermore, the transmission progresses so far that the alienation is complete and the patient continues to evolve a typical psychosis. It is for this reason that these two types are here considered under one heading.

In simultaneous insanity, in which the psychosis appears simultaneously in two or more individuals, the important etiological factor is a morbid hereditary predisposition in each patient. It is also absolutely essential that the patients should have been intimately associated with each other before the onset of the attack, living the same sort of life, often in seclusion, deprived of healthful external influences, and sharing the same hopes and fears. The immediate cause for the outbreak is usually an emotional shock, deprivation, or intoxication.

There is no form of psychosis characteristic of simultaneous insanity, although as Regis pointed out the symptoms are more often those of depression with delusions of persecution. Several published cases have presented the clinical picture of manic-depressive insanity, some of exhaustion psychoses, and many of dementia præcox. In the author's own experience forms of dementia præcox have predominated. It is not absolutely essential that both cases should present the same psychosis. A recent case came to the author's attention in which three members of the family were afflicted; two presented the manic-depressive type and the third the picture of dementia præcox. It sometimes happens that one of the two patients acts as a leader, whose edicts the other obeys implicitly.

The prognosis in this form of folie-à-deux is much better than in the others. Usually one member recovers, and often both do. The prospect of recovery depends somewhat upon the promptness with which treatment is instituted after the onset of the psychosis.

The most important indication in treatment is the complete separation of the two patients. Beyond this the treatment is only that indicated for the type of psychosis from which they are suffering.

The phenomena attending the occurrence of folie gémellaire differ in no essential particular from that occurring in simultaneous insanity, except that it is not necessary for the two persons to have been intimately associated. This form is of infrequent occurrence; Sonkhanoff (1900) reports but twenty-nine cases in literature.

In imposed and communicated insanities the psychosis of the first individual is transmitted only after greater or less resistance on the part of the second individual, usually involving considerable time, during which the two are closely associated with each other. In the former the transmission is so incomplete that the second individual does not develop a typical psychosis, the delusional ideas rapidly disappearing after the separation of the two individuals, while in the latter the second person continues even after separation to develop a typical psychosis independently of the first.

In these forms of folie-à-deux, according to Kroener, who collected one hundred and forty-six cases, morbid predisposition is no more essential than in other forms of insanity. The French maintain a different view. Here also it is quite essential that there be a prolonged and absolute intimacy between the two subjects, and the absence of all external relations capable of counterbalancing the morbid conditions. The patients have the same mode of existence and partake of the same interests. Other favorable factors are blood relationship and an intellectual or moral superiority of the original over the second individual. Furthermore, it is necessary that the delusional ideas should have some degree of plausibility or should be at least within the range of possibility in order that they be accepted by the second person.

The form of psychosis characteristic of these types of folie-à-deux is usually paranoia. The permanency of the delusions with a tendency toward systematization and the absence of any clouding of consciousness or mental reduction, makes this form of mental disease most suitable for transmission from one individual to another. The delusions of a paranoiac are also apt to be more plausible.

The prognosis is more favorable in imposed insanity, in which the second individual usually recovers after separation. In communicated insanity, on the other hand, the prognosis, in accord with that of paranoia, is very unfavorable. In view of the fact that one has no means of differentiating the two forms, imposed and communicated insanity, except by the outcome, the prognosis cannot be made until the patients have been separated for some time. As in the other form of folie-à-deux the only specific indication in treatment is immediate and permanent separation.

MORAL IMBECILITY (*Moral Insanity*).—The term "moral insanity" first described by Pritchard in 1835 as "a morbid perversion of the feelings, affections and active powers, without any illusion or erroneous conviction impressed upon the understanding; it sometimes coexists with an apparently unimpaired state of the intellectual faculties," has in recent years fallen into disuse. For many years the term was a bone of contention among alienists and especially jurists, but the difference of opinion did not refer so much to the existence of the clinical picture as it did to whether it should be regarded as a form of genuine mental disease, as a stage in some form of insanity, or simply a defect in mental development. The latter view is now generally accepted, and under the name of moral imbecility are grouped those cases in which individuals from youth up have always displayed a lack of development of the moral nature, while the perceptive and reasoning faculties are but little impaired.

Some authors still believe in the occurrence of moral insanity in individuals who have previously been free from any moral defect. They maintain that it is possible for individuals who up to a certain time have not given any evidence of moral or intellectual impairment, to lose their moral sense independently of either mental depression or exaltation, and in consequence of this diseased moral condition to speak and act immorally. Nevertheless most of these writers admit that this condition is of very infrequent occurrence. Clouston says of the many cases of this sort reported by Pritchard that most of them really belong to simple mania.

The disease usually appears on a defective hereditary basis, especially insanity, alcoholism, and epilepsy in the parents. In the few cases of acquired moral imbecility, intra-uterine disease, severe illness during infancy, head injury, shock or epilepsy during youth may be the prominent etiological factors.

At a very early age the child presents a marked contrast to the other members of the family. In spite of the fact that he may have been subjected to the same moral and intellectual influences, he is nevertheless morally deficient, shows a premature depravity, lies, steals, and exhibits cruelty toward playmates and animals. He, furthermore, is unsusceptible to moral training; severity and kindness alike fail to create natural moral feelings or to correct the depravity. Shuttleworth, in speaking of the inefficacy of moral treatment, recites his experience with three children, who at times would appear models of propriety, while at others they had all the characteristics of little demons. With innocent expression they would positively accomplish the most abominable mischief, and, after meekly acknowledging the error of their ways, would emphasize their apology by a missile flung at the head of the person who had attempted to bring them to penitence. In some cases the symptoms appear for the first time in youth, as the result of head injury or shock, or accompanying epilepsy.

Later, the natural affection for parents and relatives, as well as normal social instincts, fail to appear. The sense of shame is lacking. Patients are unable to distinguish between truth and falsehood, and steal systematically. There is an absolute moral insensibility. The sense of right and justice is lacking. They may commit to memory and recite parrot-like the ten commandments or legal statutes, but these find no response in their moral natures. For them laws are but police instructions, and their transgression simply a disobedience of them. Contact with society or individuals does not lead to an attitude of simple indifference or negation, but to anger, hatred, and a desire for revenge. The lack of altruistic feelings naturally leads to egotism, which these patients usually display to a marked degree.

The perceptive faculty is unimpaired. The patients are logical in thought and possess a good memory, yet upon close observation an intellectual defect is usually discernible in some field. They are either unreasonable or impracticable, unproductive and incapable of steady occupation or unusually impressionable. They may display considerable skill in efforts at concealment, deceit, and in devising excuses, etc., but their craftiness is not adaptable to mental application or regular employment. In some cases the mental enfeeblement is quite apparent. The patients rarely comprehend the meaning of life or the value of material things, especially money, which they lavish like a child. There is a complete absence of insight into their own immorality. As children these patients become the despair of their parents and the terror of the household, because of their idleness, vulgarity, and falsehood; and in youth a disgrace to the family because of their tendency to extravagance, thieving, and vagabondage. They never succeed in any occupation, indeed labor is a burden. Instead, they indulge in all forms of excesses, especially alcoholic and sexual. The appearance and manner are sometimes very deceptive. It has been aptly said that "they may combine the most innocent, sometimes most engaging external appearance, with an inner depth of cunning and iniquity, which must be experienced to be appreciated."

The physical symptoms characteristic of the disease are those so frequently observed in other forms of degeneracy; asymmetries, faulty articulation, choreiform movements, strabismus, a tendency to epilepsy, etc.

Although these defects continue to manifest themselves throughout life, the course of the disease is marked by periods of exacerbation. The processes accompanying puberty often bring the symptoms into more prominence. Later in life alcoholic and sexual excesses tend to produce deterioration, and ultimately a large number of these patients become inmates of penal or charitable institutions. Not infrequently other mental disturbances appear later in life, especially manic-depressive insanity and paranoia.

The prognosis is hopeless. In a few cases in which the moral defect has developed during childhood or puberty in connection with epilepsy or head injury, the symptoms may disappear with the removal of the causes of these conditions.

The diagnosis is a matter of great importance, especially in those cases in which the patients have come in conflict with the law. The mere presence of moral defect is not sufficient, as this may as well be the result of a defective training as of a defect in the organization of the brain. Therefore, it is essential to establish the existence of a congenital defect from which these clinical symptoms have sprung. In establishing the presence of this cerebral anomaly, we have these important factors: a defective heredity, signs of degeneracy in the patient, such as intolerance for alcohol or a tendency to epileptoid conditions; and the appearance of the first signs of moral defect at a time when faulty environment and bad example could not be responsible, and often when the patients are enjoying every advantage of an excellent education. In connection with this we often have the absolute incorrigibility and inaccessibility to any form of correction. The presence of intellectual impairment, as well as emotional irritability, add weight to the diagnosis.

The only hope for successful treatment is in training and education. Yet, as already indicated, one of the fundamental symptoms of the disease is the inaccessibility to methods of training. Kerlin maintained that to educate them only gave them added power for evil, and that they should not be allowed to prey upon society. However, if removed from bad environment at an early age into institutions especially adapted to their care, where they may be restrained and given religious training for a number of years, a few patients will improve, but the vast majority of them will return to old vices as soon as released.

If the disease is acquired on the basis of epilepsy or head injury, it may disappear with improvement of the causes giving rise to these conditions. "These savages in the midst of culture," as Krafft-Ebing puts it, demand for their own as well as the protection of society detention in charitable institutions.

The following is the history of a case of moral imbecility which came to the author's attention five years ago.

The maternal grandmother of the patient was insane, and the maternal grandfather had attempted suicide. Her development both mental and physical was normal until four years of age, at which time she developed a "mean disposition, shown by hatred of her younger brother and sister, whom she constantly annoyed and mistreated. As she grew older she never exhibited the natural affection for her parents; she was never loving, but always disobedient and deceitful." In spite of moral and religious surroundings, religious tendencies never appeared and she never could be relied upon to tell the truth. Before puberty her hateful disposition, intractability, and a tendency to seek immoral associates compelled her parents to send her to a convent. Here at fifteen years of age, her unnatural sexual desires, irregular conduct, moral perversity, and contaminating influence upon her associates necessitated her removal and commitment to the hospital. She was a bright scholar, pleasant and vivacious in manner, engaging in conversation, and possessing a fair knowledge of French and music. These qualities, with her industry, made her a general favorite with her associates. To a chance acquaintance she might appear a model of propriety, but to those with whom she was closely associated there were many evidences of moral depravity. She chose to associate most intimately with those of low moral tone, with whom she was vulgar, at times profane and even boisterous. Her intimacy with some female nurses suggested sexual perversion. She took every available opportunity to flirt or converse with male employees, whose presence seemed to fire her with exhilaration. To the physician she recited the most preposterous stories about her sexual indulgence and alcoholic habits, which were also repeated with even greater exaggeration to her associates. She frequently wrote to friends and relatives letters filled with extravagant and untruthful statements. A few lines from a letter to her former teacher in the convent offers a good illustration. "I was going to write you in some moments that I should be in my right senses to tell you that I had kept my promise, etc. . . . Indeed, I have not forgotten the 'Sacred Heart!' When I am in my right mind, and at other times, I often imagine that I am going through the regular programme of the day. Sometimes I rave in French too. . . . We patients are used to seeing each other out of our minds and we get together and talk very calmly over our mental diseases." During menstruation, which was often painful, she was frequently quite depressed, unhappy, and morose, and at such times would talk of her future and frequently expressed the wish that she were dead. During the three years of residence at the hospital she always positively declared that she had no desire to be moral, and would give herself up to a life of prostitution when released. Six months after her discharge, word was received that she had left her home and started her immoral career.

Allen R. Defendorf.

XXII. INSANITY: PARANOIA.—(Synonyms: *Primaere Verrücktheit;* Chronic Delusional Insanity; Monomania; Reasoning Mania; Progressive Systematized Insanity.)

Paranoia is a psychosis of insidious onset, developing gradually on a defective basis, and is clinically characterized by the progressive evolution of a permanent system of persecutory and expansive delusions (the latter generally leading to a change of personality); retrospective falsifications of memory and hallucinations at some period but without clouding of consciousness, incoherence, or mental deterioration except in judgment, which is biassed by the delusions. The disease is a distinct entity—a continuous process extending throughout life, and may present remissions but no intermissions, although the temporary apparent subsidence of aggressive symptoms may be mistaken for such. It is always primary, and the varied affective disturbances which have been alleged as the cause of a so-called "secondary paranoia" are to be considered as much a part of the disease as the course and outcome.

HISTORY.—Paranoia was a term used by the best Greek writers to denote insanity, but apparently was first employed by modern writers in 1764, when Vogel applied it as a collective name to nine different forms of mental disease. Its first application in its modern sense is due to Mendel (1881). The next most important contributions to its elucidation come from French, German, and, later, Italian observers. The term has thus far found little favor in England. Its application by different writers in different lands has shown wide variations, and the varieties have been as numerous, many being based on the age at onset, the character of the delusions and hallucinations, or some particular feature which has led to the formation of a special variety. This has caused much unnecessary confusion, since the term paranoia has thus been made to include psychoses which have no true paranoiac character, or even symptoms which appear only temporarily in them.

For a very full and interesting account of the evolution of the disease-picture, from the "partial insanity" of Boerhaave, Rush, and Kant; the "monomanie intellectuelle" of Esquirol; Lasègue's "mania of persecution"; the "Verrücktheit" of Griesinger, and so on, see Magnan's lectures on "Chronic Delusional Insanity."*

ETIOLOGY.—Cases of paranoia comprise about 2 per cent. of admissions to hospitals, although in any one year this proportion may be exceeded or diminished. In the last biennial period at the Connecticut Hospital for the Insane the per cent. was 6.44, all the cases having received thorough examination according to Kraepelin's classification, with demonstration and confirmation at the staff meetings. From the beginning, however, 182 cases have been admitted—a percentage of 1.9. Kraepelin states that more men are affected than women, but here of the above 182 cases only 76 were men.†

Paranoia develops on a defective basis or constitutional neuropathic groundwork. Although the degenerative significance of the disease picture has been doubted, most authors fully accept it. Berkley says: "I have never seen a paranoiac, in whose case a full and complete history could be obtained, that did not have an hereditary history of drunkenness, family neuroses, or actual insanity." In most cases the degeneracy is hereditary (abnormal character, psychoses, constitutional neuroses, or dipsomania in progenitors); while less often it is the result of infantile diseases of brain, defective development of brain or cranium, etc. There may also be a diminished power of resistance in the cortical cells. Tanzi and Riva found heredity in 77 per cent. of cases, disturbances of development in 9.6 per cent., while in the remaining 14 per cent. hereditary influences were not demonstrated, but neither were they excluded.

The defective basis is recognized by peculiar traits in early life—moodiness, dreaminess, reserve, sexual perversions, and often by physical stigmata. Some display marked aptitude for special mental or physical work, but still more show a certain incapacity or lack of perseverance.

The full development of the psychosis usually occurs between the ages of twenty-five and forty, but may take place in youth or even in advanced life. In 182 cases studied by the writer the onset in 77.9 per cent. occurred between the ages of twenty and fifty, and in 37.8 per cent. between thirty and forty. Alleged exciting causes are acute diseases, anæmia, gastro-intestinal affections with accompanying auto-intoxication, uterine diseases, puberty, the climacteric, trauma, excessive mental stress, shock, excesses, business reverses, deprivation, and disappointment.

PATHOLOGY.—No definite anatomical basis, except evidences of degeneration or anomalies in the brain, has been demonstrated. Besides vascular anomalies, "skull asymmetry is not infrequent, and corresponding deviations from the normal in the formation of convolutions, bridging of fissures, or an unusual direction of the sulci,

* Amer. Jour. Insan., vols. l. and lii.

† At the Worcester Hospital in 1900 there were admitted 74 cases of paranoic condition, of whom only 24 were men.