These problems are inter-related. The law will not be transgressed when the needs of the public are satisfied within its provisions; and the desire to protect the doctor by emphasizing the function of the magistrate may conflict with the main object of freeing mental treatment from unnecessary obstacles.

These matters are of great importance to psychiatrists, and the future of the science in this country hangs on their wise solution.

I am confident that those in authority are anxious to afford due protection to the doctor; probably they also desire to solve the vexed problem of treatment without legal processes, and I hope that when the Government realizes that the Commission's proposals fail to give effect to the principles and ideals expressed in its Report, owing to the idea that one particular element in lunacy administration is unalterable, they will have the courage, as they have the power, to go beyond the halting attitude of the proposals and give effect to the progressive spirit which otherwise pervades the Report, and that if they do this Parliament will abandon prejudices and support a courageous and broad-minded policy.

Hallucinations and Sanity.* By Dr. M. J. NOLAN, Medical Superintendent, Down County Mental Hospital, Downpatrick.

WHEN the patient, F. E-, handed me the MSS. entitled "Hallucinations and Sanity," I recalled a paper read to this Association some ten years ago by the late Dr. Hunter Steen-a paper which Sir George Savage at the time styled as "most encyclopædic" (vide Journ. Ment. Sci., 1917, pp. 328 and 437). In the course of a most instructive discussion following on it, some points were raised which are especially noteworthy. The President, Col. D. G. Thomson, reiterated his opinion of thirty years' standing, that insanity and disorder of mind are not one and the same thing: that as a hallucination is a disorder of mind, it does not follow that the person who experiences it is necessarily insane. Sir George Savage agreed in the view, and instanced in support of it the case of a man who was confined in an asylum because he heard "voices," with regard to which the patient declared, "My ideas appear to me as voices, but I know they are voices. They are not imperative to me, and they have no more influence upon my conduct than the ideas which pass through your mind have upon your conduct "-Sir George Savage had previously admitted to this

LXXIV.

^{*} A paper read at a meeting of the Irish Division in the Royal College of Physicians, Dublin, on November 24, 1927.

man that he had ideas passing through his mind which he did not always act upon. Dr. Pasmore favoured the definition of a hallucination as "an autogenetic irritation of the brain, giving rise to a pseudo-sense impression." He also instanced four cases of chronic hallucinations in apparently normal persons, all of whom broke down mentally when the hallucinations became persecutory and affected their personality. He said he would have preferred the title of Dr. Steen's paper to be "Hallucinations in the Apparently Sane," not, as it was entitled, "Hallucinations in the Sane." Now I think that the title of my patient's MSS. is preferable to that of Dr. Steen or that suggested by Dr. Pasmore, as the real question of importance to us is not the hallucination per se, but how the hallucination is accepted by the reasoning power of the person who experiences it. There is, I venture to submit, a very subtle distinction underlying this aspect of the matter. I do not propose to enter into a consideration of the many fascinating theories as to how the hallucinatory phenomenon is brought about, nor to go into detailed classification of the various classes of hallucination; but for the purpose of clearness I may say I adopt the view that all hallucinations are essentially of mental origin, and that any subdivision of them based on physical or purely psychical causes must, of necessity, be speculative, the causes in the main being physico-psychogenic. As Warren points out, "Both sensations and ideas are central processes-one sort may very readily be mistaken for the other if its characteristics fall within the borderline territority." Now inasmuch as the blind see them and the deaf hear them, it is obvious that peripheral excitation is unnecessary for the production of hallucinations.

It is to this border-line territory, this "no-man's land," that hypnagogic hallucinations essentially belong, and it is under the title "hypnagogic" we find sane hallucinations very meagrely dealt with in our medical text-books-Maury gave them this name some sixty-six years ago. They generally occur at a time immediately preceding or immediately following sleep in normal persons. In the transitional state visual hallucinations are more frequent before deep sleep, and auditory hallucinations more frequent when awaking from it, and the phenomena may occur singly or in groups. But the term "hypnagogic" does not seem to me to correctly cover those other hallucinatory experiences which occur neither immediately before or after sleep, but when sleep is altogether absent. when there is great activity in the psychical, sensory and even motor systems, and when they are experienced by persons who otherwise exhibit abnormal psycho-sensorial disturbances. Goethe saw himself in full daylight in the open country. Handel,

transferred by the erethism of creative musical genius, having transcribed the triumphal final notes of the Hallelujah Chorus of the Messiah from brain to score, threw up his hands and exclaimed, "I did think I did see all Heaven before me, and the Great God Himself!" There are many such hallucinatory experiences to be found in the biographies of historical people whose sanity was unquestioned, but possibly some of these expressions have no more truthful basis than the recorded death-bed utterances of illustrious personages—utterances worthy of these great ones and appropriate to the occasion, had mental and physical power to think and speak remained intact. Bianchi naïvely states, "Hallucinations were more frequent in olden time than in the present day." Possibly they are being replaced by newer fashions in "spirits" and "familiars," and other such-like media.

But the reduction in the number of sane persons who experience hallucinations may be accounted for otherwise than by a metastasis, so to speak, in the character of psycho-sensorial manifestations. At the present time the trend of thought is towards materialism, even allowing for the leavening of post-war pseudo-spiritualism. People, too, are more critically cautious in any interpretation of the unusual, and the rush of daily life leaves little time to intrigue them into that degree of introspection which, allied to strained attention—hyperprosexia—is the chief exciting factor of those phenomena.

Bearing in mind the hallucinatory experiences of Goethe and Handel, let us consider like experiences in the cases of two of my patients. One, a woman, had the rare hallucination—dictoroscopy —like Goethe, of seeing herself in full daylight, in a fairly crowded thoroughfare, wending through the wayfarers approaching in her direction. In her case the hallucination was but one of many of a persecutory type from which she suffered, and which were based on delusion. Seeing herself as she did on this particular occasion caused her much distress, as it was made to appear she was "gadding" about at a time she should have been nursing an invalid mother, and moreover she was made to appear wearing, at an unsuitable time, a blue velvet dress (her favourite colour) which she had designed and fashioned, and she was very distinctly impressed by the hue of the velvet in the bright sunshine. She saw herself as in a mirror.

I have at present a female patient who is "forced to see herself on the films" in situations of an objectionable kind. In her case she sees herself, not as in a mirror, but as a picture of herself taken against her will.

Handel's rhapsody was the transport of an artist, and was probably

of a synæsthetic type, the audition of his composition which had been conceived in his mind determining the visual imagery of inspiring associations. A male patient told me that during the daytime, when in special states of religious excitation, he had visions of a celestial houri, and heard at the same time what he regarded as allurements uttered in some unknown tongue, but in a rhythmical crescendo. This man suffered from many other hallucinations of a persecutory type.

Dr. Steen, in concluding his exhaustive paper, summarized his deductions, or as he termed them, lessons, into five points :

1. Hallucinations do occur in the sane.

2. Hallucinations do not essentially differ in the sane and insane.

3. Hallucinations can be produced by toxins in the sane and insane.

4. Hallucinations can occur independently of physical changes.

5. As hallucinations occur in cases of multiple personality, a disorder of association, it is suggested all hallucinations may depend on some process of dissociation.

Now to these five points I would add a sixth :

6. Hallucinations when recognized as such, whether or not their causation is understood by those who experience them, may be regarded as sane when they are not acted on in any degree; and as insane when they are translated into action which is detrimental to those persons, or to others.

This is, I think, a very important deduction from what we know of hallucinations, more particularly from a medico-legal aspect of the subject-an aspect which seems very rarely to present itself, though disordered mental states are so frequently discussed by lawyers and others. Last week, Lord Chief Justice Hewart, at the Medical Society of London, lectured on the medical as compared with the legal view of insanity, especially as regards "impulse," but in the abstract I have seen, no reference was made to hallucination, which is possibly one of the most fertile sources of morbid impulse. And last week the foreman of a jury in England returned to the box to ask the Judge, "When is a delusion sane, and when is a delusion insane?" A query closely akin to that now considered -when is a hallucination sane, and when is a hallucination insane? It is a matter of regret that his Lordship's reply was not reported. Briefly the answer might be given, When it is irresistible, that is to say when the delusion or hallucination is translated into conduct that outrages social laws. "After all," said Lord Hewart, " the mere fact that a man thinks he is John the Baptist does not entitle him to shoot his mother." Still less should it justify his

execution for that act if, as it may be, the man thought he was John the Baptist because the voice of God told him so, and moreover insisted on his murdering his mother in some particular way. But if his action in the matter was impulsive and there were no antecedent indications of mental disorder, and more particularly if there was an obvious motive—medical evidence goes by the board, and the wretch must hang. Any more tolerance in dealing with such cases would undoubtedly lead to abuse of the plea of irresistible impulse. The solution would be a longer period of observation before trial, for a very close examination into the mental state underlying the hallucinatory condition.

There are also, I have no doubt, many similar cases to those that come under my own notice, cases in which (a) rational conduct may be the outcome of abnormal hallucinations, and (b) irrational conduct the outcome of hallucinations.

In the first case, a man suffering from pronounced pre-senile dementia has visual and auditory hallucinations—which latter induce him to do certain things he should properly do—and in the second a man takes a certain line of conduct which is logically rational, but which he is forced to adopt on the advice of enemy "voices." In the first case the man is insane apart from his hallucinations (birds bringing him verbal messages), yet his interpretation of them determines rational conduct. In the second case, hallucinations (auditory) compel him against his better judgment to adopt a course of action which is apparently suited to the exigencies of the occasion. In the case of F. E—, life was threatened by his imaginary persecutors; if he complained of their ill-treatment to a doctor, they would take the doctor's life also consequently he made no complaint.

Lord Hewart also asked, "If a man of abnormally jealous disposition entertains suspicions as to the chastity of his wife, and these become what it is fashionable to call an 'obsession,' and finally a fixed delusion, is he with impunity to kill her by poisoning, having done all he could to conceal the crime?" The legal verdict is that he must pay the penalty, while I venture to say the medical verdict would be that the man is insane. In any event, lifelong detention should meet the justice of the case, for is it not within common knowledge that many insane criminals conscious of their wrongdoing have endeavoured to hide their guilt?

I have often considerable difficulty in dealing with insane jealousy, and have not been satisfied in some cases that there was any truth in the charges made of unfaithfulness until I elicited obviously insane hallucinations or illusions—the former more frequently. The misconduct is seen by the patient under incredible

circumstances—he admits that at the time he took no action whatsoever; he displayed no more emotion than if it was a picture of strangers forced on his attention, though later he resented the imaginary outrage in some insane fashion.

The two essential points in connection with hallucinations in the sane are (1) those who experience them attribute them to natural causes, the nature of which, organic or functional, they may or may not be capable of understanding. (2) The hallucinations are disregarded by them, and do not influence thought or affect action.

There is reason to think that a more thorough examination of the hallucinations of persons whose sanity is questioned in cases of testamentary and other medico-legal importance would do much to sweep away conflicting medical evidence. It is to be remembered that the cultured have more complex hallucinations. The mechanism is that of subconscious dissociation. In the investigation of these phenomena it is to be remembered that there is a normal dissociation, as well as a pathological dissociation in mental activity. When the mental processes are normal or abnormal as the case may be, passing functional faults in the one, and permanent defects in the other give rise to sane or insane hallucinations. And it must also be kept in view that these hallucinations must not, as Pear points out, be regarded as a unitory subject, since there are many subclasses of visualizers whose imagery may be separately classed according to clearness, vividness, obtrusiveness, relevance, readiness, utility, etc. Pear also stresses the importance of classification while the hallucination is still recent, as these images show distinct "structuration" round a nucleus of interest.

They are in almost all cases the outcome of brain fatigue, and they are usually recognized as such. Morton Prince holds that they are thought processes in highly developed persons, and not, as regarded by Freud, a regression to infantile thought. Mosso tells us of a dramatist who, when suffering from mental fatigue, enacted his dramas with the *dramatis personæ*, who were not only visualized by him, but he heard each one recite his part, and he called them up again and again for correction and revision whenever he deemed it necessary. But as a rule the hallucinations of the sane are comparable to snapshots of incidents, rather than to the panoramas of an older and the "movies" of the present generation; but whatever they may be—"figures," "voices," "smells," or "tastes" —they are regarded as hallucinations from some unknown but natural cause.

These brief remarks are by way of introduction to the paper entitled "Hallucinations and Sanity," by a patient, F. E-, whose

1928.]

case of paraphrenia phantastica I brought under your notice some years ago (vide Journ. Ment. Sci., April, 1922, p. 163). Hallucinations, as you may remember, are a feature of that disorder, and he had visual, auditory, olfactory, kinæsthetic and sexual disturbance. All these he fully recognizes as hallucination, and believes that he is subjected to them by demons who exercise their malign powers against him, sometimes directly by unseen agencies, but more frequently persons with whom he comes in contact. Like flashlights these hallucinations throw a lurid illumination into the dark recesses of the parasitic growth of his delusions, and reveal the paranoid continuity of the demoniac theory on which his phantasy is based.

Hallucinations and Sanity by "F. E...."

"For God's Sake, my brethren, think it possible that ye may be mistaken," said the wise, heroic and fundamentally honest Oliver Cromwell, to one of his fractious, bigoted and mudhole Parliaments. They were called to help the great Protector of English freedom at home and abroad, with their practical advice on pressing every day affairs. Instead they forced on the Tribunus Plebis the extremely uncongenial role of Dictator, by captiously picking to pieces the Instrument of Government by virtue of which they were summoned, and devising creeds to be enforced on Episcopalians and Independants alike under sanction of fine and imprisonment, endeavouring in fact to establish the universal hypocrisy and malevolence to God and man ever dear to the true spiritual children of the Jean Calvin, who outbawled Paul and outsnivelled Augustine, who was not a drunken and dissolute Roman Catholic Priest, but was the blackest demon of the Pit, that ever wrote in elegant almost classical Latin, and put skill in argument at the service of the utterly blasphemously illogical, and drove countless millions into despair and debauchery, that are the natural concomitants of that " doctrine of devils" predestination, whereby "ad majorem Dei (cujus cunque) gloriam" most creatures are destined, utterly irrespective of any wish, feeling or effort on their part (and consequently irrespective of any merit or demerit), to commit an unending succession of sins, to become progressively worse, to be damned both with disgrace and suffering eternal, to be in fact the victims of a stupendous inhuman badgering on the part of a Supreme Ruler of the Universe, compared to whom the vivisectors who cut to pieces quivering dumb animals, rendered by curari incapable of protest or struggle, but not of feeling, are kindhearted and sympathetic, in fact for whom the only possible excuse is that He is the mad Creator Preserver and Destroyer of a mad Universe.

Yet those, who hold the preposterous doctrine of combined helplessness and blameworthiness, not only walk about at liberty as if sane sincere men and women; but even claim to be extra hardheaded and farsighted; and ferocious thoughthating parrots claim to be both philosophers and philanthropists, the most encyclopædic of encyclopedistes being treated as a presumptuous ignoramus by parish jackasses, that have learnt by heart the Shorter Catechism, a dozen hymns and a score of texts, applied at rhvme and random, of jumbled Scripture. "Tis with a score of texts, applied at rhyme and random, of jumbled Scripture. men's minds as with their watches; no two are alike, yet each one thinks his own the best." "Moses spake with God, as a man with his friend, and perished not." Mahomed likewise-but Mahomed was born a few centuries too late and a few hundred miles too far South, and is therefore an epileptic impostor. Abraham heard voices telling him to leave his country, to sacrifice his son, to spare his son, to plead for an alien city with an irate but vacillating Jehovah. Paul saw a dazzling light from Heaven and heard a voice saying "Saul, Saul (Jehovah or Jesus, as a good Jew, would not utter his gentile name Paulus), why persecutest thou me ? " John the Divine (sic) saw all manner of weird animals and conglomerations and catastrophes, worthy of a day of circus or a night of drink. Yet millions who devoutly believe all these and many more miracles, even more

repulsive to the moral as well as the logical sense; sneer at or pity Romanists who believe that Jeanne d'Arc really was inspired by saints of earlier epochs to deliver France from the ferociously pious truly Christian and ultramontanely Catholic English, or Mormons, who believe in the mysteriously engraved gold plates Joseph Smith found, and Brigham Young, the greatest theocrat since Moses (that cowardly repulsive jackal Calvin can claim no position among the great, as certainly he has none among the good) exploited, or Indians who venerate the wise pious and conciliatory Kabir and Nanak; and who immure in Lunatic Asylums those who in their own day see visions and utter prophecies as dismal as Jeremiah, as gorgeous as Canticles, as bloodstained and menacing as the Apocalypse.

A wise God does not stultify himself, a kind God does not belittle and discourage His creatures, a great God does not work in a patchy hand-to-mouth miraculous fashion, remedying the imperfection of His laws by the intervention of His Providence. A "Deus ex machina" is, like telling lies, "a very present help in time of trouble," but cannot possibly be the one true God "Who is above all and through all and in all." Who has immutable laws that will in their due time, laws of matter, laws of logic and laws of ethic in concert (a concert serene and undiscordant and that knows not failure, utterly unlike the gaudy puny ephemeral concert of Europe), unerringly and with a hundred per cent exactitude "render unto every man according to his works." "For God is not slack concerning His promise (implicit in all Nature), as men count slackness; for with the Lord a thousand years are as one day." "We are not come unto Mount Sinai that quaked exceedingly; but unto the Father of Lights, with whom is no darkness nor shadow that is caused by turning."

Then where in Earth, Heaven or Hell do these voices, visions, misgivings, premonitions and so forth come from ? The Authorized (by a section of the Medical Profession) Version, the Red Book, the Handbook for Attendants on the Insane, bluntly declares that delusions are due to disease or injury or misfunctioning of the brain, and that anyone, who says that insanity is due to possession or torment by evil spirits (other than those sold over a counter), shows his ignorance and superstition. Automatic unconscious cerebration is a fine formula, almost as comforting as "that blessed word Mesopotamia." Also it is very convenient for the *fiends*, whoever they are, who torture millions, and drive thousands into abnormality and Asylums for the Insane. A person, who hears or reads an encouraging or a discouraging phrase, might recall that phrase, divorced from its original context and wedded to an inappropriate ludicrous filthy or terrible new setting; but that individuals, and there are thousands of them in every country, who are striving to occupy themselves with wholesome sensible righteous ideas and occupations, should continually be pestered with filthy menacing or offensively ridiculous suggestions, without the intervention of "some power, not ourselves, that makes for unrighteousness," requires the credulity, or the smug hypocrisy, of the professional alienist. It is a fact of human life, recognized by sensible honest middle-men of all time, that beings are subject to temptation. Temptation can have three possible sources, First God-God tempted various people, either directly or by a false prophet or evil spirit directly commissioned for the purpose -at least the Old Testament says so time and again. But the New Testament has a different message; "Let no man, when he is tempted, say 'I am tempted of God,' for God tempteth no man, nor can He be tempted of any." Second-the beings own self, "But a man is tempted by his own lusts." No doubt that is the truth, but it is not by any means the whole truth nor even the main body of the truth. "No man liveth unto himself, and assuredly no man dieth unto A lifelong Robinson Crusoe might have only himself to thank for any himself." evil or foolish thoughts words or deeds, so far as his contemporaries are concerned, but even he might be overpowered by the influence of his ancestors, near or remote. A bad drop in his blood might frustrate for a whole lifetime his efforts after holiness, heroism, wisdom, or business success; or an incurably good disposition might keep a waster and a rotter brave, busy, wise and blessed with every beatitude for a whole century. But the vast majority of mankind live in circumstances in which they are continually influencing and being influenced by their fellows. Even the absent or the dead still influence us by their example, the remembrance of them, and also by their influence, unless we are to label delusionaries or fabricators countless millions in all epochs, countries, climates, nations, religions and races. The discovery and great development of wireless telegraphy and wireless

telephony in recent years should lead any broadminded intelligent unprejudiced person (unhappily even in the most enlightened countries still only a small percentage of the population) to realize the possibility, nay the certainty of wireless telepathy, combined in some cases with wireless telephony and wireless telephoty, and its foul abuse to mislead human reason, to plunge human beings in the most abject misery, the most awful apprehensions, and the most degrading superstitions. An evil circle is created. Persons brought up in superstition, which properly includes all religion, are ready to accept as supernatural any messages, whether accompanied or not accompanied by auditory sensation, may even be on the lookout for them; and their experience of abnormal phenomena will confirm both their own belief and their friends' belief in the correctness of the poisonous myths dripped into their childish ears. Furthermore, excessive indulgence in alcoholic and other poisons, and attacks of debilitating fevers, especially malarial fever, the longrange depressant and derangeant par excellence, immensely facilitate the onset of aural, ocular, nasal and palpitory hallucinations. The victims, in Mahommedan lands run about an equal chance of being venerated as prophets or stoned to death as blasphemers, in Roman Catholic and in old-fashioned Protestant countries the more enlightened might have them consigned to Lunatic Asylums, in modern times in progressive countries only the more ignorant retrograde sections of the community still limit the possible explanations of abnormal phenomena to either Divine inspiration or to unholy trafficking with the Devil and the pendulum has swung almost as far in the opposite direction, permitting the glib denial of any external influence on mental patients. Because God does not directly intervene in the beyond lilliputian concerns of insignificant crawlers over a grain of dust planet; it does not follow that those crawlers do not influence each other in ways more subtle than the obvious calls on their sight hearing, tasting, smelling and feeling, less respectful of their freewill than the printed, flashed or vibrated appeal which cannot obtrude on unready subjects. There are many Antichrists" is far nearer the truth than the fable of Ormuz & Ahriman, coequal & coeternal spirits of good & evil, ever striving for unattainable mastery. Evil telepathists are rarely, if ever, so crude as to begin with the direct suggestion of a definite worded threat, insult, cajolery or flattery. They begin with the vague suggestion of undefinable evil, with sensual, not intellectual urgings to evil courses, or to lopsided exaggerated indulgence in good courses, with bringing about a dreamy lackadaisical slowcoachy way of going through the daily round. If possible, they propel towards erratic ideas and habits and gloomy views of religion, to a sense of impending doom, earthly or eternal, inexorable or only avoidable by sacrificing the things that best make life worth living or by doing some appalling deed. If they can drive an individual away from the herd into the desert they can the more easily slow down and half paralyse all the processes of thought and volition, and produce a condition of apprehension of listening for suggestions not made by visible companions. The suggestions gradually become more empathic more frequent and more definitely worded. Should the victim take alarm, and strive to disattend to the uncanny suggestions, a faint faraway but insistent ringing is in his ears for many seconds, even several minutes, with taunting or tantalizing or appealing voices interjected and finally coming in a great volume of objurgation or denunciation or prohibition, accompanied by the most awful bloodcurdling threats to the victim and all he holds dear.

Some few honest folk, after the shock of the first few days and weeks, realize that these voices or suggestions cannot be from above, but must be a case of "Satan appearing as an angel of light," and resolutely persistently disattend to them, neither erring by doing what is suggested nor erring almost as fatally by doing the exact opposite to what is suggested, try to disparalyse their mind and solve the problems of their earthly career by their own judgment, as if they were a chess or golf player, buzzed around by a crowd of incompetent or illdisposed bystanders. But most either sink into a melancholy lethargy or any kind of violent, filthy, illnatured or ridiculous way of going on suggested by the voices, or resort to futile expedients to combat or propitiate them, *e.g.* prayer to God or to Saints, appeals to fellowhumans, appeals to the invisible tormentors, arguments with them, threats of what they will do to them, some kind of penance or magical performance, Bible-reading, hymnsinging and the like. The few wise ones, being fairly calm and rational in their conduct, get out—if their relatives like to take them out. Otherwise, sane or insane, in they stay, till in many cases they lose all hope and selfrespect and touch with an outside world that is changing faster and faster each generation. Because they are already cruelly hampered by incessant telepathic tormenting, therefore they must be lifelong prisoners along with the filthy, the obscene, the violent, the noisy and the pestering. The awful injustice of it all does not worry alienists, since their whole system, their whole philosophy is based on the fundamental injustice of treating human beings as irresponsible semi-automatons, the prey of their instincts and their delusions, and not as men and women, tremendously hampered, no doubt, by inherited passions, ignorance and false teaching, but still mainly capable of being influenced by rewards and punishments, and sometimes by reasoning.

Lectures in hygiene, physiology, psychology and logic should be given in all Asylums to all fairly quiet intelligent patients. On the contrary, the tendency is to treat thought as dangerous, doctors thus showing their obscurantist affinity to clergyman, to discourage all reading except the lightest and most frivolous books and magazines, and to assign to the patients, yokels and scholars alike, tasks of unskilled labour in field and garden and kitchen and corridor and laundry. "Laborare est orare" is not true. Prayer is foolish and wrong. Work is useful and beneficial. But unskilled work is not very useful nor very beneficial, neither to the person so employed nor to the world at large. Overstudy is injurious in itself, but much more so through what it bars out ; fresh air, exercise, versatility, sociability. It is a question of the degree of badness, whether no company or bad company is worse for an individual. But in Asylums decent, wellbehaved folk are herded with the vilest of the vile. Instead of a dozen galleries or villas, there should be two-score or more in an Asylum of a thousand or more. Illbehaviour only should condemn to the refractory wards, viz:-violence, filthiness, noisiness, pesteringness; not, as now, independence of character, selfdefence or self-protection against violence, insult, obscenity, pestering, noise and filth. Good conduct amounting to cure, and entitling to release, should not be cajoling, flattering and slavish obsequiousness to doctors, attendants and relatives. Asylums should be fewer and larger, and the Resident Superintendent should be a retired judge with a judge's salary, and none should be admitted or discharged except after a fair trial before a judge. Then merely hearing voices, changing one's religion, disagreeing with one's relatives, stigmatising any immoral smart set, comparing oneself to reformers of the past, temporary breakdowns, would no longer be held sufficient cause for sentencing to indefinite, in many cases lifelong, imprisonment.

Bacterial Change in Mental Disorder: Coliform Group. By F. H. STEWART, M.A., D.Sc., M.D., D.P.M., Major, Indian Medical Service (retired), Cheddleton Mental Hospital.

THE literature dealing with coliform intestinal bacteria in patients suffering from mental disorder is extremely scanty. Goodall, *Journal* of Mental Science, 1927, p. 368, writes: "As regards our knowledge of the intestinal tract as a source of infection I consider that the position is still very unsatisfactory. . . For a few years prior to 1914 my colleagues and I at the Cardiff Mental Hospital Laboratory had carried out much tedious work on the bacteriology of the fæces in states of acute melancholia and mania. An extensive survey in 1914 of all the foreign literature of importance enabled me to state that extremely little work had been done in this direction." The same author, *ibid.*, 1923, p. 421, states: "In 1914 I stated that extremely little work had been done by way of bacteriological examination of the fæces in cases of mental