pyrosis, colic, cholera, diarrhoea, diabetes, hysteria, hydrophobia. Cullen is at his best in subjects for which a sagacious observation and large experience are most effective. Thus he is well equipped for dyspepsia, which he perceives to be often a secondary affection, for syncope, and the like. Hypochondriacs, he tells us, are not to be driven out of their position by reason or raillery, but by artifice and stratagem. In epilepsy he recommends the ligature of a limb above an aura; he distinguishes those attacks wherein the spasm is partial in its origin, and consciousness usually not lost; and he recognises the evil of repetition of attacks of nervous disease, as tending to a habit.

The Vesanias form an important division, and they lent themselves no less than now to mild philosophisings and literary descriptions. He thinks in mania the control of "awe" is a therapeutical means not to be forgone, and that thereunto "stripes" should be cautiously exhibited; advice for which there was no need. (William Tuke and Lindley Murray called their meeting to found the Retreat at York in 1792, about ten years after the first edition of Cullen's *Practice of Physic*.)

Headache is inserted next by Dr. Thomson from the *Clinical Lectures*. "As a disease," says Cullen, "it is obscure, as a symptom difficult." He objects to attribute it to the "acrimony (acidity as we call it) suspected everywhere, even in the nervous fluid itself." His description of megrim is good, especially of the pulse in this malady; but in treatment he is not so good as he might have been; he mixes simple headache with organic disease of the brain, and satisfies himself with such words as "topical fever." He recommends low diet, cold bathing, and avoidance of debauch and fatigue. Of other divisions, such as Cachexias, Emaciations, Intumescences (including adiposity, flatulence, dropsies, and even rickets); and of Impetigines (including scrofula, syphilis, scurvy, jaundice (he denies "hæmatogenous jaundice" but had for the most part gall stone in his mind) we have not space to treat, interesting as are many of the parts; but the essential confusion of his explicit classification is such that his best paragraphs can only be regarded as *obiter dicta*. As gout must be a "spasm" or an "atony," it appears as an atony of the stomach. On therapeutics Cullen is on the whole negative and pessimist. He does not by any means give up bleeding, but is cautious and sparing in its use; he has seen much harm done by its large and routine use in all kinds of patients, and especially in the convalescence which, after free bleeding, is apt to be delayed by weakness and anæmia. In rheumatic fever he notices this disadvantage, as indeed did Sydenham himself; and he advises the practitioner to be content with woollen clothes and the new "Dover's powder." Of purging he has even less favourable things to say, unless there be a cold and bound belly, from which he thinks some infection may arise. The passions of the mind are to be mitigated in illness, a measure which he "leaves to the philosophers, or, if you will, to the divines." He also promotes for good the wholesome conditions of life, urging in the prevention and relief of disease the temperance which he never forgets in his philosophy. Concerning drugs Cullen speaks with the same reticence and mistrust: many are the deceptions to which we are liable in estimating their effects; indeed, he leaves few galenical reputations standing. On the one hand, he feels that art is needed as well as Nature; but on the other, experience did not strengthen his faith in medicine as it was in his day; our feeling is that his patients had an eminently judicious physician who would make few mistakes, but inspire no confident hopes. The divorce of surgery from medicine was unfortunate in Cullen's time, as in all other times; for, in the positive and experimental work of the Hunters and

the Monros, surgery was then making the way for the re-generation of medicine. The modern reader of Watson's *Lectures* (published about 1840) may wonder at the vast distance between Watson's standpoint and his own; but in Watson's generation physicians had at least assimilated much of the teaching of the morbid anatomists (Morgagni, Baillie, Bright), and of the great French school of Laënnec, by which the art had been transformed. Out of these materials was built a more comprehensive and scientific method, in which the thought of a teacher of medicine was dictated by likenesses and difference of a far profounder kind than were recognised in the time of Cullen. If to us Watson seems far off, the vista of the half century from Watson backward to Cullen seems so much farther as to carry us not as it were into a previous generation, but into a previous age. Still by his sceptical and cautious temper Cullen prepared the way for the new constructions; thus he sapped the foundation of the old medicine, and dismissed the philosophers. In discussing mental disorders he could not but mention such thinkers as Descartes and Leibnitz, but he calmly says that their systems explain nothing, and if admitted, have no application in medical doctrine. Of the experimental method, of pathology human or comparative, of embryology, or even of evolution itself, Cullen knew nothing; but of the old conceptions, to be destroyed for the new, Cullen proclaimed the emptiness. And one great reform he promoted which is yet far from consummated—he dethroned Disease and set up the Patient; he distrusted systems, and he saw that the only real is the individual. Another example he set which it were well that we should imitate: he thought with vigour, discernment, and accuracy, and therefore wrote with lucidity, proportion, and correctness. *O! si sic nostra!* If Watson's admirable style is at times a little precious, if the labour of his file is sometimes to be overheard, Cullen writes so far better than he. The careless reader of Cullen, who runs and reads, does not know how much had gone to that insight, shrewdness, limpidity, and precision. And, as a summer lightning which is everywhere and yet nowhere, there is within all his reflections a keen sense of humour; but it is the humour of an artist who will not sacrifice his art of perfect expression even for a witticism. Cullen was not a great man, nor even a scientific man in his own sphere; there were many fruitful things even within his reach of which he was too sceptical to see the promise; but he was eminently one of those in whom *initium sapientiæ est stultitia caruisse*. And yet this lucid and temperate spirit had scarcely taken wing when the chimera of the disputations and disreputable Brown caught the fancy of half Europe. Such is the irony of history!

Lunacy and its Treatment in 1800.

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IN no department of medicine, perhaps, is the contrast between the knowledge and practice in 1800 and the knowledge and practice in 1900 so great as in the department that deals with insanity. In these days, when county vies with county, and borough with borough, in the erection of palaces, ever more and more magnificent, for the reception of the insane pauper; when the leading idea in the treatment of the insane seems to be to impress them with the splendour of their abodes; when a single slap given to a troublesome lunatic by

an exasperated nurse echoes through the length and breadth of the land, is the subject of magisterial jurisdiction, is solemnly investigated by commissioners, is recorded in Blue Books, and formally reported to the Lord Chancellor and the nation; it is difficult to realise the state of the accommodation and treatment of the insane that existed one hundred years ago.

CHAINS, MANACLES, AND MUZZLES.

In 1800 the Retreat at York had been established for eight years, and the system of treating the insane with humanity, which Samuel Tuke was thus conducting, aroused a frantic opposition. Pinel's labours were unknown in this country, and Tuke was regarded as more fit to be the inmate than the conductor of an asylum. The number of asylums in England, public and private, was 15; it is now 170. The number of registered insane persons in 1799 was about 10,000; in 1899 it was 106,611. Large numbers of insane persons, for whom there was no accommodation in asylums, were detained in prisons; many more were in workhouses, chained in the cellar or in the garret; fastened to the leg of a table; tied to a post in an outhouse, or perhaps shut up in an uninhabited room, or left to ramble half-naked and half-starved through the country.

Of all the lunatics in the kingdom it was computed (by Sir G. Paul) that one-half were not under any kind of protection from ill-treatment, or placed in a situation to be relieved of their malady. Indeed the lot of those who were merely neglected was enviable indeed beside that of those who were "cared for" in madhouses. These institutions were all conducted on much the same principles, and the curious circumstance to us is, that while some attempts were made to conceal the greatest atrocities, the general routine of barbarity was complacently admitted and upheld, as the necessary, proper, and praiseworthy method of dealing with the insane. The modes of concealing what was too bad to be revealed were not marred by any excess of squeamishness. At the York Lunatic Asylum in 1814 it was discovered, that of 365 deaths only 221 had been reported; that a patient having been killed, his body was hurried away to prevent an inquest; that two sets of books were kept, one containing the actual receipts and disbursements, the other a fictitious set of accounts for the use of the governors; and lastly, that when the inquiry was pushed, a wing of the asylum conveniently caught fire, and was burnt, together with several patients and much that was to be inquired into.

As to Bethlem, the authorities took some pains by denial and prevarication to evade responsibility for the worst cases, but for the most part they rather boasted of, than apologised for, their arrangements. The presiding genius was Haslam, the resident apothecary, who seems to have exercised autocratic power, and whose *Observations on Madness*, containing humane recommendations strangely at variance with his practice, were published in 1798. According to his evidence before the Select Committee in 1815, the patients were generally chained to the wall, either with manacles or by one leg or arm. Some of them were chained to the tables and sat there in absolute nakedness the whole year round. One patient, a man named Norris, was secured by an iron collar which was chained to the wall; by an iron frame in which his body was encaged, confining his arms above the elbow; and by a chain from his ankle to his bed, and in this predicament he was kept for twelve years. His treatment was considered by the governors "to have been upon the whole rather a merciful and humane than a rigorous and severe imposition." Haslam swore that this mode of confinement was "decidedly necessary"; and the

governors declared that the general management of Bethlem, as affecting the health, the cleanliness, and the comfort of the patients was of a nature creditable to the governors and others concerned in its administration.

In the Lancaster Asylum are still preserved muzzles, chains, girdles, handcuffs, manacles, and leg-locks by the hundred-weight, all of which were in use in 1800, and most of which were in use to as late a date as 1840. This was at a time when the Retreat at York had demonstrated for many years that nothing was lost and everything gained by treating lunatics as human beings.

LUNACY LAW.

Legal protection for the insane there was practically none. It is true that madhouses, as they were termed, had to be licensed, but the Act of 1774, which contained this provision, provided also that licences should be granted "to all persons who shall desire the same." The commissioners had no power to discharge a patient, however satisfied they might be of his sanity; and although they could revoke a licence, they could not refuse to grant it again when it was applied for, so that their power of revocation was effectually nullified. The commissioners were empowered and required by the Act to visit madhouses, but, as these powers were limited to making a report to the College of Physicians, which itself was impotent to enforce any of their recommendations, they soon ceased to exercise their useless visitatorial function. The same admirable Act required for the legal detention of a lunatic an order made by a friend of the patient and a medical certificate. It contained no provision, however, that the certificate should be made by a duly-authorized physician, surgeon, or apothecary, so that certificates could be, and great numbers of them were, signed by unlicensed and unqualified persons, who called themselves apothecaries for this purpose. Again, anyone who styled himself the friend of the patient could sign the order for his admission; the same person who signed the order could, and often did, sign the certificate as apothecary, and the one designation was often as false as the other. Moreover, the keeper of the madhouse could himself sign both the order and the certificate for a person placed under his charge.

The commissioners were fully aware of all these abuses, but they were powerless to interfere. Bill after Bill was brought into and passed through the House of Commons to put a stop to them, but all were thrown out by the Lords, where the opposition was led by that great champion of legality, Lord Eldon. Among those who were chained, manacled, whipped, and kept in nakedness the whole year round were notoriously a certain percentage of sane people. Anyone who was troublesome to his friends or whom it was desired to get rid of, could be seized and taken to a madhouse, from which none had power to discharge him; and, to baffle investigation, the keepers of these dens had a system of bestowing fictitious names upon their prisoners, whose real names were known to their gaolers only.

CORPORAL CHASTISEMENT.

More surprising even than the chains and manacles, the nakedness and other horrors, was the use of corporal chastisement avowedly as a means, not of punishment, but of cure. It was taught that the sentiment of fear is the first, and for a long time the only, means by which the mind of a lunatic can be influenced. "When a maniac fears he commences to reason more justly, to connect certain effects with certain causes, and to judge the future by the past. The appeal to his fears is the first essential step to take in his treatment." Accordingly, a necessary part of the equipment of every

"keeper" was a whip, which he used at discretion, and in Hogarth's pictures of Bedlam the keeper is depicted with a whip stuck in his belt. This practice was still continued in 1800. "Keepers" were allowed, and even encouraged, to retaliate upon violent patients; and even George III, the revered Father of the people, who was rarely spoken of but with slavish adulation, was not only repeatedly put into a strait-waistcoat, but on at least one occasion was knocked down "as flat as a flounder" by his keeper. This was told by an eyewitness to Dr. Paul of Camberwell, who died in 1899.

MEDICAL TREATMENT OF INSANITY.

The medical treatment of insanity was in intelligence and humanity much on a par with the mechanical. Dr. T. Munro, who was physician to Bethlem in 1800, has thus described it: "Patients are ordered to be bled about the latter end of May, according to the weather; after they have been bled they take vomits once a week for a certain number of weeks; after that we purge the patients. That has been the practice invariably for years, long before my time; it was handed down to me by my father, and I do not know any better practice." The venesections were not scamped. In acute mania 30 or 40 ounces were drawn at a time, and this was followed by the application of 20 or 30 leeches to the temples. Sir Everard Home advised that George III should be bled till he fainted, but the king flatly refused this mode of treatment, and the court physician had to content himself with an abundance of leeches. The other remedies employed were hellebore, setons, issues, blisters to the head and legs, opium, camphor, musk, medicated snuff, ice and snow to the head, and music.

THEORIES OF THE NATURE AND CAUSES OF INSANITY.

As an alternative to the "unnatural and brutish violence," as he calls it, with which the insane were usually controlled, Pargeter insists with great solemnity and force upon the importance of "catching the eye" of the patient, and he relates several cases in which most intractable maniacs were subdued by this simple means. "I suddenly unlocked the door," says he, "ran into the room, and caught his eye in an instant. *The business was then done*; he became peaceable in a moment, trembled with fear, and was as governable as it was possible for a furious madman to be."

Pargeter did not think it possible for the human understanding to advance any other theory of insanity than that of Cullen, that the nervous fluid or electric aura which is secreted by the cerebrum and cerebellum and propelled into the nervous tubules, is capable of manifold variations in quantity, of many alterations in quality, may become thicker or thinner in consistence; and "a certain morbid or irritating principle or quality of that fluid acting upon the brain is the primary cause of insanity,..... but what the specific nature of that morbid quality is it is impossible to conceive, and it will no doubt remain for ever secret."

The causation of insanity lay chiefly in the luxury of the times. "Our ancestors deviated from the regular and temperate manner of life—our grandfathers were therefore weaker than our ancestors their offspring were still weaker than themselves, and we of the fourth generation have scarcely any idea, except what we learn from history, of former health and vigour." In addition to this, "the frequent and immoderate use of tea—long fasting—inflammatory food—turning day into night and night into day—the order of Nature most shamefully inverted—our time is

vilely prostituted—every active instrument of health is mutilated and maimed—our bodies become enervated, and our intellectual faculties impaired, and the date of life abridged—it is seriously to be remarked that in this age it is easier to meet with a *mad* than a *healthy* woman of fashion."

So wrote Pargeter, the chief authority upon insanity, in 1792, and if we are inclined to smile at the crudity of his inferences, we may perchance recover our gravity by asking ourselves what opinion our descendants in the year 2000 are likely to hold of the view that insanity is increasing at the beginning of the twentieth century owing to the hurry and rush of life, the increased severity of competition, the crowding into the towns, the spread of education, and the general rise in the standard of living.

Midwifery and Gynæcology in 1800.

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THE progress that has been made in midwifery and gynæcology during the century that is closing, will be most clearly brought out if the reader be invited to look through what at the beginning of this century was a standard work upon the subject. Dr. Thomas Denman was then the leading practitioner in that department; he was an able, well-informed, and judicious man. The fifth and last edition of his *Introduction to the Practice of Midwifery* was published in 1805, and may fairly be taken to represent the high-water mark of knowledge of its subject at that time. In many things it corrected error and improved practice, but it is not the present purpose to dwell on its merits, but rather to point out where it has been left behind. Gynæcology hardly existed then; the word "midwifery," as used by Denman, included the diseases special to women.

PELVIC DEFORMITIES.

Denman's description of the normal pelvis is such that a modern editor, while he might perhaps fill in a little more detail, would hardly erase anything. But when Denman treats of deformed pelves, we find that he was aware that rickets and osteomalacia deformed the pelvis, but there his knowledge stopped. He could say nothing more about a deformed pelvis than that it was deformed. Since his time the pelvic deformities caused by the two diseases he mentions have been differentiated and explained: different varieties of the rickety pelvis have been shown to exist; and many pelvic deformities unknown to Denman have been described, methods for their diagnosis supplied, and their effects on labour analysed. Knowledge always brings power. The knowledge which enables us now to distinguish different kinds of pelvic deformity from one another, and to measure the amount of pelvic contraction, has given us the power of conducting labour with contracted pelvis with a precision of aim and a certainty of successful result impossible to Denman and his contemporaries.

We have realised another advance, curiously predicted by Denman, though not exactly in the way that he expected. Speaking of osteomalacia, he says: "It is far less frequent than the rachitis, but more dreadful in its consequences, which no medicine hitherto tried has had sufficient efficacy to prevent or to cure." A page further on he says, "Yet it is possible, by attending to the secretions, and discovering an excess or defect of phosphoric acid or the like principles, th