MAD IN AMERICA

BAD SCIENCE, BAD MEDICINE, AND THE ENDURING MISTREATMENT OF THE MENTALLY ILL

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BEDLAM IN MEDICINE

Terror acts powerfully upon the body, through the medium of the mind, and should be employed in the cure of madness.

—Benjamin Rush[1]

A visitor to the "mad" wards of Pennsylvania Hospital at the turn of the nineteenth century would have found the halls astir with an air of reform. A few years earlier, in 1796 to be exact, the lunatics had been moved from unheated, dingy cells in the basement, where they had often slept on straw and been confined in chains, to a new wing, where their rooms were above ground. Here the winter chill was broken by a coal-fired stove, and occasionally the mad patients could even take a warm bath. Most important of all, they now began to receive regular medical treatments—a regimen of care, physician Benjamin Rush proudly told the Pennsylvania Hospital overseers, that had "lately been discovered to be effectual in treating their disorder."[2]

The introduction of medical treatments had been a long time coming. In 1751, when Quakers and other community leaders in Philadelphia had petitioned the Pennsylvania colonial assembly

for funds to build the hospital, the first in the colonies, they had told of medical care that could help restore sanity to the mad mind. "It has been found," wrote Benjamin Franklin, who authored the plea, "by the experience of many Years, that above two Thirds of the Mad People received into Bethlehem Hospital [in England] and there treated properly, have been perfectly cured."[3] English mad-doctors had indeed begun making such claims and had even published books describing their effective treatments. However, while Franklin and his fellow Quakers may have hoped to bring such medicine to the colonies, they also had a second reason for building the hospital. There were, they wrote, too many lunatics "going at large [who] are a Terror to their neighbors, who are daily apprehensive of the Violences they may commit." Society needed to be protected from the insane, and it was this second function—hospital as jail—that had taken precedence when the hospital opened in 1756.

In those early years, the lunatics were kept in gloomy, foul-smelling cells and were ruled over by "keepers" who used their whips freely. Unruly patients, when not being beaten, were regularly "chained to rings of iron, let into the floor or wall of the cell . . . restrained in hand-cuffs or ankle-irons," and bundled into Madd-shirts that "left the patient an impotent bundle of wrath."[4] A visiting reverend, Manasseh Cutler, described the sorry scene:

> We next took a view of the Maniacs. Their cells are in the lower story, which is partly underground. These cells are about ten feet square, made as strong as a prison . . . Here were both men and women, between twenty and thirty in number. Some of them have beds; most of them clean straw. Some of them were extremely fierce and raving, nearly or quite naked; some singing and dancing; some in despair; some were dumb and would not open their mouths.[5]

The lunatics also had to suffer the indignity of serving as a public spectacle. After the hospital opened, visiting the mad had quickly become a popular Sunday outing, similar to visiting a zoo. Philadelphians were eager to get a glimpse of these wretched creatures, with good sport on occasion to be had by taunting them, particularly those restrained in irons and easily roused into a rage. So frequent

were the public's visits, and so disturbing to the insane, that the hospital managers erected a fence in 1760 "to prevent the Disturbance which is given to the Lunatics confin'd in the Cells by the great Numbers of People who frequently resort and converse with them."[6] But even an iron fence couldn't keep the public at bay, and so in 1762, the hospital, trying to make the best of an unfortunate situation, began charging a visitor's fee of four pence.

All of this began to change once Rush arrived at the hospital in 1783.

The lunatics could not have hoped for a more kind-hearted man to be their advocate. Born of Quaker parents, Rush was constantly championing liberal, humanitarian reforms. As a young man, he had been a member of the Continental Congress and a signer of the Declaration of Independence. He'd advocated for the abolition of slavery and prison reform, and he brought this same compassion to his treatment of the mad. At his request, the hospital's governing board built a new wing for the insane patients, which was completed in 1796, and soon many patients were enjoying the comforts of rooms furnished with hair mattresses and feather beds. Those who were well behaved were allowed to stroll about the hospital grounds and engage in activities like sewing, gardening, and cutting straw. Rush also believed that games, music, and friendship could prove helpful, and the hospital even agreed to his request that "a Well qualified Person be employed as a Friend and Companion to the Lunatics."[7] The insane, he explained to hospital attendants, needed to be treated with kindness and respect. "Every thing necessary for their comfort should be provided for them, and every promise made to them should be faithfully and punctually performed."[8]

But such humanitarian care could only go so far. Rush was also a man of science. He'd studied at the University of Edinburgh, the most prestigious medical school in the world at the time. There, he'd been mentored by the great William Cullen, whose *First Lines of the Practice of Physic* was perhaps the leading medical text of the day. The European mad-doctors had developed a diverse array of therapeutics for curing madness, and Rush, eager to make Pennsylvania Hospital a place of modern medicine, employed their methods with great vigor. And this was treatment of an altogether different type.

They Are Brutes, Aren't They?

One of the first English physicians to write extensively on madness, its nature, and the proper treatments for it was Thomas Willis. He was highly admired for his investigations into the nervous system, and his 1684 text on insanity set the tone for the many medical guides that would be written over the next 100 years by English mad-doctors. The book's title neatly summed up his view of the mad: *The Practice of Physick: Two Discourses Concerning the Soul of Brutes.* His belief—that the insane were animal-like in kind—reflected prevailing conceptions about the nature of man. The great English scientists and philosophers of the seventeenth century—Francis Bacon, Isaac Newton, John Locke, and others—had all argued that reason was the faculty that elevated humankind above the animals. This was the form of intelligence that enabled man to scientifically know his world, and to create a civilized society. Thus the insane, by virtue of having lost their reason, were seen as having descended to a brutish state. They were, Willis explained, fierce creatures who enjoyed superhuman strength. "They can break cords and chains, break down doors or walls . . . they are almost never tired . . . they bear cold, heat, watching, fasting, strokes, and wounds, without any sensible hurt."[9] The mad, he added, if they were to be cured, needed to hold their physicians in awe and think of them as their "tormentors."

> Discipline, threats, fetters, and blows are needed as much as medical treatment . . . Truly nothing is more necessary and more effective for the recovery of these people than forcing them to respect and fear intimidation. By this method, the mind, held back by restraint, is induced to give up its arrogance and wild ideas and it soon becomes meek and orderly. This is why maniacs often recover much sooner if they are treated with tortures and torments in a hovel instead of with medicaments.[10]

A medical paradigm for treating the mad had been born, and eighteenth-century English medical texts regularly repeated this basic wisdom. In 1751, Richard Mead explained that the madman was a brute who could be expected to "attack his fellow creatures

with fury like a wild beast" and thus needed "to be tied down and even beat, to prevent his doing mischief to himself or others."[11] Thomas Bakewell told of how a maniac "bellowed like a wild beast, and shook his chain almost constantly for several days and nights . . . I therefore got up, took a hand whip, and gave him a few smart stripes upon the shoulders . . . He disturbed me no more."[12] Physician Charles Bell, in his book *Essays on the Anatomy of Expression in Painting,* advised artists wishing to depict madmen "to learn the character of the human countenance when devoid of expression, and reduced to the state of lower animals."[13]

Like all wild animals, lunatics needed to be dominated and broken. The primary treatments advocated by English physicians were those that physically weakened the mad—bleeding to the point of fainting and the regular use of powerful purges, emetics, and nausea-inducing agents. All of this could quickly reduce even the strongest maniac to a pitiful, whimpering state. William Cullen, reviewing bleeding practices, noted that some advised cutting into the jugular vein.[14] Purges and emetics, which would make the mad patient violently sick, were to be repeatedly administered over an extended period. John Monro, superintendent of Bethlehem Asylum, gave one of his patients sixty-one vomit-inducing emetics in six months, including strong doses on eighteen successive nights.[15] Mercury and other chemical agents, meanwhile, were used to induce nausea so fierce that the patient could not hope to have the mental strength to rant and rave. "While nausea lasts," George Man Burrows advised, "hallucinations of long adherence will be suspended, and sometimes be perfectly removed, or perhaps exchanged for others, and the most furious will become tranquil and obedient." It was, he added, "far safer to reduce the patient by nauseating him than by depleting him."[16]

A near-starvation diet was another recommendation for robbing the madman of his strength. The various depleting remedies—bleedings, purgings, emetics, and nausea-inducing agents—were also said to be therapeutic because they inflicted considerable pain, and thus the madman's mind became focused on this sensation rather than on his usual raving thoughts. Blistering was another treatment useful for stirring great bodily pain. Mustard powders could be rubbed on a shaved scalp, and once the

blisters formed, a caustic rubbed into the blisters to further irritate and infect the scalp. "The suffering that attends the formation of these pustules is often indescribable," wrote one physician. The madman's pain could be expected to increase as he rubbed his hands in the caustic and touched his genitals, a pain that would enable the patient to "regain consciousness of his true self, to wake from his supersensual slumber and to stay awake."[17]

All of these physically depleting, painful therapies also had a psychological value: They were feared by the lunatics, and thus the mere threat of their employment could get the lunatics to behave in a better manner. Together with liberal use of restraints and an occasional beating, the mad would learn to cower before their doctors and attendants. "In most cases it has appeared to be necessary to employ a very constant impression of fear; and therefore to inspire them with the awe and dread of some particular persons, especially of those who are to be constantly near them," Cullen wrote. "This awe and dread is therefore, by one means or other, to be acquired; in the first place by their being the authors of all the restraints that may be occasionally proper; but sometimes it may be necessary to acquire it even by stripes and blows. The former, although having the appearance of more severity, are much safer than strokes or blows about the head."[18]

Such were the writings of the English mad-doctors in the 1700s. The mad were to be tamed. But were such treatments really curative? In the beginning, the mad-doctors were hesitant to boldly make that claim. But gradually they began to change their tune, and they did so for a simple reason: It gave them a leg up in the profitable madhouse business.

Merchants of Madness

In eighteenth-century England, the London asylum Bethlehem was almost entirely a place for the poor insane. The well-to-do in London shipped their family lunatics to private madhouses, a trade that had begun to emerge in the first part of the century. These boarding homes also served as convenient dumping grounds for relatives who were simply annoying or unwanted. Men could get

free from their wives in this manner—had not their noisome, bothersome spouses gone quite daft in the head? A physician who would attest to this fact could earn a nice sum—a fee for the consultation and a referral fee from the madhouse owner. Doctors who owned madhouses made out particularly well. William Battie, who operated madhouses in Islington and Clerkenwell, left an estate valued at between £100,000 and £200,000, a fabulous sum for the time, which was derived largely from this trade.[19]

Even though most of the mad and not-so-mad committed to the private madhouses came from better families, they could still expect neglect and the harsh flicker of the whip. As reformer Daniel Defoe protested in 1728, "Is it not enough to make any one mad to be suddenly clap'd up, stripp'd, whipp'd, ill fed, and worse us'd?"[20] In the face of such public criticism, the madhouse operators protested that their methods, while seemingly harsh, were remedies that could restore the mad to their senses. They weren't just methods for managing lunatics, but curative medical treatments. In 1758, Battie wrote: "Madness is, contrary to the opinion of some unthinking persons, as manageable as many other distempers, which are equally dreadful and obstinate."[21] He devoted a full three chapters to cures.

In 1774, the English mad trade got a boost with the passage of the Act for Regulating Madhouses, Licensings, and Inspection. The new law prevented the commitment of a person to a madhouse unless a physician had certified the person as insane (which is the origin of the term "certifiably insane"). Physicians were now the sole arbiters of insanity, a legal authority that made the mad-doctoring trade more profitable than ever. Then, in 1788, King George III suffered a bout of madness, and his recovery provided the mad-doctors with public proof of their curative ways.

Francis Willis, the prominent London physician called upon by the queen to treat King George, was bold in proclaiming his powers. He boasted to the English Parliament that he could reliably cure "nine out of ten" mad patients and that he "rarely missed curing any [patients] that I had so early under my care: I mean radically cured."[22] On December 5, 1788, he arrived at the king's residence in Kew with an assistant, three keepers, a straight waistcoat,

and the belief that a madman needed to be broken like a "horse in a manège." King George III was so appalled by the sight of the keepers and the straight waistcoat that he flew into a rage—a reaction that caused Willis to immediately put him into the confining garment.

As was his custom, Willis quickly strove to assert his dominance over his patient. When the king resisted or protested in any way, Willis had him "clapped into the straight-waistcoat, often with a band across his chest, and his legs tied to the bed." Blisters were raised on the king's legs and quickly became infected, the king pleading that the pustules "burnt and tortured him"—a complaint that earned him yet another turn in the straight waistcoat. Soon his legs were so painful and sore that he couldn't walk, his mind now wondering how a "king lay in this damned confined condition." He was repeatedly bled, with leeches placed on his temples, and sedated with opium pills. Willis also surreptitiously laced his food with emetics, which made the king so violently sick that, on one occasion, he "knelt on his chair and prayed that God would be pleased either to restore Him to his Senses, or permit that He might die directly."

In the first month of 1789, the battle between the patient and doctor became ever more fierce. King George III—bled, purged, blistered, restrained, and sedated, his food secretly sprinkled with a tartar emetic to make him sick—sought to escape, offering a bribe to his keepers. He would give them annuities for life if they would just free him from the mad-doctor. Willis responded by bringing in a new piece of medical equipment—a restraint chair that bound him more tightly than the straight waistcoat—and by replacing his pages with strangers. The king would no longer be allowed the sight of familiar faces, which he took as evidence "that Willis's men meant to murder him."

In late February, the king made an apparently miraculous recovery. His agitation and delusions abated, and he soon resumed his royal duties. Historians today believe that King George III, rather than being mad, suffered from a rare genetic disorder called porphyria, which can lead to high levels of toxic substances in the body that cause temporary delirium. He might have recovered more quickly, they believe, if Willis's medical treatments had not

so weakened him that they "aggravated the underlying condition."[23] But in 1789, the return of the king's sanity was, for the mad-doctors, a medical triumph of the most visible sort.

In the wake of the king's recovery, a number of English physicians raced to exploit the commercial opportunity at hand by publishing their novel methods for curing insanity. Their marketing message was often as neat as a twentieth century sound bite: "Insanity proved curable."[24] One operator of a madhouse in Chelsea, Benjamin Faulkner, even offered a money-back guarantee: Unless patients were cured within six months, all board, lodging, and medical treatments would be provided "free of all expence whatever."[25] The mad trade in England flourished. The number of private madhouses in the London area increased from twenty-two in 1788 to double that number by 1820, growth so stunning that many began to worry that insanity was a malady particularly common to the English.

In this era of medical optimism, English physicians—and their counterparts in other European countries—developed an ever more innovative array of therapeutics. Dunking the patient in water became quite popular—a therapy intended both to cool the patient's scalp and to provoke terror. Physicians advised pouring buckets of water on the patient from a great height or placing the patient under a waterfall; they also devised machines and pumps that could pummel the patient with a torrent of water. The painful blasts of water were effective "as a remedy and a punishment," one that made patients "complain of pain as if the lateral lobes of the cerebrum were split asunder."[26] The Bath of Surprise became a staple of many asylums: The lunatic, often while being led blindfolded across a room, would suddenly be dropped through a trapdoor into a tub of cold water—the unexpected plunge hopefully inducing such terror that the patient's senses might be dramatically restored. Cullen found this approach particularly valuable:

> Maniacs have often been relieved, and sometimes entirely cured, by the use of cold bathing, especially when administered in a certain manner. This seems to consist, in throwing the madman in the cold water by surprise; by detaining him in it for some length of time; and pouring water frequently upon the head, while the whole of

> the body except the head is immersed in the water; and thus managing the whole process, so as that, with the assistance of some fear, a refrigerant effect may be produced. This, I can affirm, has been often useful.[27]

The most extreme form of water therapy involved temporarily drowning the patient. This practice had its roots in a recommendation made by the renowned clinician of Leyden, Hermann Boerhaave. "The greatest remedy for [mania] is to throw the Patient unwarily into the Sea, and to keep him under Water as long as he can possibly bear without being quite stifled."[28] Burrows, reviewing this practice in 1828, said it was designed to create "the effect of asphyxia, or suspension of vital as well as of all intellectual operations, so far as safety would permit."[29] Boerhaave's advice led mad-doctors to concoct various methods for simulating drowning, such as placing the patient into a box drilled with holes and then submerging it underwater. Joseph Guislain built an elaborate mechanism for drowning the patient, which he called "The Chinese Temple." The maniac would be locked into an iron cage that would be mechanically lowered, much in the manner of an elevator car, into a pond. "To expose the madman to the action of this device," Guislain explained, "he is led into the interior of this cage: one servant shuts the door from the outside while the other releases a break which, by this maneuver, causes the patient to sink down, shut up in the cage, under the water. Having produced the desired effect, one raises the machine again."[30]

The most common mechanical device to be employed in European asylums during this period was a swinging chair. Invented by Englishman Joseph Mason Cox, the chair could, in one fell swoop, physically weaken the patient, inflict great pain, and invoke terror—all effects perceived as therapeutic for the mad. The chair, hung from a wooden frame, would be rotated rapidly by an operator to induce in the patient "fatigue, exhaustion, pallor, horripilatio [goose bumps], vertigo, etc," thereby producing "new associations and trains of thoughts."[31] In the hands of a skilled operator, able to rapidly alter the directional motion of the swing, it could reliably produce nausea, vomiting, and violent convulsions. Patients would also involuntarily urinate and defecate, and plead for

the machine to be stopped. The treatment was so powerful, said one nineteenth-century physician, that if the swing didn't make a mad person obedient, nothing would.[32]

Once Cox's swing had been introduced, asylum doctors tried many variations on the theme—spinning beds, spinning stools, and spinning boards were all introduced. In this spirit of innovation and medical advance, one inventor built a swing that could twirl four patients at once, at revolutions up to 100 per minute. Cox's swing and other twirling devices, however, were eventually banned by several European governments, the protective laws spurred by a public repulsed by the apparent cruelty of such therapeutics. This governmental intrusion into medical affairs caused Burrows, a madhouse owner who claimed that he cured 91 percent of his patients, to complain that an ignorant public would "instruct us that patient endurance and kindliness of heart are the only effectual remedies for insanity!"[33]

Even the more mainstream treatments—the Bath of Surprise, the swinging chair, the painful blistering—might have given a compassionate physician like Rush pause. But mad-doctors were advised to not let their sentiments keep them from doing their duty. It was the highest form of "cruelty," one eighteenth-century physician advised, "not to be bold in the Administration of Medicine."[34] Even those who urged that the insane, in general, should be treated with kindness, saw a need for such heroic treatments to knock down mania. "Certain cases of mania seem to require a boldness of practice, which a young physician of sensibility may feel a reluctance to adopt," wrote Thomas Percival, setting forth ethical guidelines for physicians. "On such occasions he must not yield to timidity, but fortify his mind by the councils of his more experienced brethren of the faculty."[35]

Psychiatry in America

It was with those teachings in mind that Rush introduced medical treatments into the regimen of care at Pennsylvania Hospital. Although he was a Quaker, a reformist, and one who could empathize with the unfortunate, he was also an educated man, confident in the powers of science, and that meant embracing the practices

advocated in Europe. "My first principles in medicine were derived from Dr. Boerhaave," he wrote, citing as his inspiration the very physician who had dreamed up drowning therapy.[36] Moreover, at the time, he and other leading American doctors were struggling to develop an academic foundation for their profession, with European medicine the model to emulate. Before the American Revolution, fewer than 5 percent of the 3,500 doctors in the country had degrees, and only about 10 percent had any formal training at all. Medicine in colonial America had a well-deserved reputation as a refuge for quacks. But that was changing. In 1765, the first medical school in America had been established at the College of Philadelphia, where Rush was one of the faculty members. In the 1790s, medical societies were formed, and the first periodical medical journal was published. It all led to a proud sense of achievement—American medicine was now a scientific discipline. "There were the usual comments that more had been achieved in science over the preceding hundred years than in all the past centuries," wrote historian Richard Shryock. "Now and then, [there was] even a hint that there was little left for posterity to do in the medical line."[37]

Rush's conception of madness reflected the teachings of his European mentors. He believed that madness was caused by "morbid and irregular" actions in the blood vessels of the brain.[38] This abnormal circulation of the blood, he wrote, could be due to any number of physical or psychological causes. An injury to the brain, too much labor, extreme weather, worms, consumption, constipation, masturbation, intense study, and too much imagination could all cause a circulatory imbalance. To fix this circulatory disorder, he advocated the copious bleeding of patients, particularly those with mania. He drew 200 ounces of blood from one patient in less than two months; in another instance, he bled a manic patient forty-seven times, removing nearly four gallons of blood. As much as "four-fifths of the blood in the body" should be drawn away, he said. His bleeding regimen was so extreme that other doctors publicly criticized it as a "murderous dose" and a "dose for a horse," barbs that Rush dismissed as the talk of physicians competing "for business and money."[39]

As he employed other remedies he'd learned from the Europeans, he did so in ways that fit his belief that madness was due to

a circulatory disorder. For instance, he argued that blisters should be raised on the ankles rather than the scalp, as this would draw blood away from the overheated head. Caustics could be applied to the back of the neck, the wound kept open for months or even years, as this would induce a "permanent discharge" from the overheated brain. The head could also be directly treated. The scalp could be shaved and cold water and ice dumped on the overheated brain. Purges and emetics could also draw blood away from the inflamed brain to the stomach and other organs. Rush administered all of these treatments confident that they were scientific and worked by helping to normalize blood flow in the brain.

Although Rush constantly preached the need to treat the insane in a kind manner, at times he adopted the language of his English teachers, comparing lunatics to the "tyger, the mad bull, and the enraged dog." Intimidation tactics could be used to control them; patients might even be threatened with death. "Fear," he said, "accompanied with pain and a sense of shame, has sometimes cured this disease." A doctor in Georgia, he recounted, had successfully cured a madman by dropping him into a well, the lunatic nearly drowning before he was taken out. Concluded Rush: "Terror acts powerfully upon the body, through the medium of the mind, and should be employed in the cure of madness."[40]

Rush also made use of spinning therapy. Patients suffering from melancholy, or "torpid madness," would be strapped horizontally to a board that could be mechanically spun at great speeds, a device he called the gyrator. He reasoned this version of madness was caused by too little blood circulation in the head (rather than the fullness of circulation that led to mania) and that by placing the patient with his or her feet at the board's fixed point of motion, blood would rush to the brain. The treatment also made the mad so weak and dizzy that any wild thoughts would be temporarily driven from the brain. Burrows, who urged that every modern asylum should have a gyrator in its medical arsenal, said that it could instill fear in even the most hopeless cases.

> Where no expectation of cure has been entertained, a few trials have produced a wonderful improvement in manners and behaviour. Where the degree of violence has been so great as to compel a

> rigid confinement, the patient has become tractable, and even kind and gentle, from its operation. The morbid association of ideas has been interrupted, and even the spell of the monomaniac's cherished delusion broken.[41]

Rush was particularly proud of the "Tranquilizer Chair" he invented, which he boasted could "assist in curing madness." Once strapped into the chair, lunatics could not move at all—their arms were bound, their wrists immobilized, their feet clamped together—and their sight was blocked by a wooden contraption confining the head. A bucket was placed beneath the seat for defecation, as patients would be restrained for long periods at a time. Rush wrote:

> It binds and confines every part of the body. By keeping the trunk erect, it lessens the impetus of blood toward the brain. By preventing the muscles from acting, it prevents the force and frequency of the pulse, and by the position of the head and feet favors the easy application of cold water or ice to the former and warm water to the latter. Its effects have been truly delightful to me. It acts as a sedative to the tongue and temper as well as to the blood vessels. In 24, 12, six and in some cases in four hours, the most refractory patients have been composed. I call it a Tranquilizer.[42]

This was the first American therapeutic for insanity that was exported back to the Europeans. Asylum physicians eagerly embraced it, finding that it would "make the most stubborn and irascible patients gentle and submissive," and since patients found it painful, "the new and unpleasant situation engages his attention and directs it toward something external."[43] One told of keeping a patient in the chair for six months.

Rush stood at the very pinnacle of American medicine at that time. He was the young country's leading authority on madness, and other American physicians copied his ways. They too would bleed their insane patients and weaken them with purges, emetics, and nausea-inducing drugs. Physicians familiar with his teachings might also use water therapies. A Delaware physician, writing in an

1802 medical journal, told of the dousing therapy he'd utilized while treating an insane man confined at home. "He was chained to the floor, with his hands tied across his breast—clothes torn off, except the shirt—his feet and elbows bruised considerably—and his countenance, grimaces and incoherent language, truly descriptive of his unhappy condition. As he was free from fever, and his pulse not tense or preternaturally full, I deemed his a fair case for the application of cold water."[44]

At least a few early American physicians tested the merits of drowning therapy. A Dr. Willard, who ran a private madhouse in a small town near the border of Massachusetts and Rhode Island, used this European technique as part of his efforts "to break the patient's will and make him learn that he had a master." Dr. Willard's methods were carefully described by Isaac Ray, a prominent nineteenth-century psychiatrist:

> The idea was . . . that if the patient was nearly drowned and then brought to life, he would take a fresh start, leaving his disease behind. Dr. Willard had a tank prepared on the premises, into which the patient, enclosed in a coffin-like box with holes, was lowered by means of a well-sweep. He was kept there until bubbles of air cease to rise, then was taken out, rubbed and revived.[45]

There don't appear to be any historical accounts from patients recording what it was like to endure this therapy. But a history of Brattleboro, Vermont, written in 1880, does describe briefly the reaction of Richard Whitney—a prominent Vermont citizen—to being plunged, one day in 1815, headfirst into the water and held there until all air had left his lungs:

> A council of physicians . . . decided upon trying, for the recovery of Mr. Whitney, a temporary suspension of his consciousness by keeping him completely immersed in water three or four minutes, or until he became insensible, and then resuscitate or awaken him to a new life. Passing through this desperate ordeal, it was hoped, would divert his mind, break the chain of unhappy associations, and thus remove the cause of his disease. Upon trial, this system of regeneration proved of

> no avail for, with the returning consciousness of the patient, came the knell of departed hopes, as he exclaimed, "You can't drown love!"[46]

The Vermont physicians, thus disappointed, turned to opium as a cure, a treatment that subsequently killed the lovesick Richard Whitney.