

## Death in the Darkroom: Poisonings of Nineteenth Century Photographers

by Bill Jay

The pages of 19th century photographic periodicals are littered with the tales of hardships and dangers endured by early photographers. Many did not endure—they were defeated or killed by their insatiable need for pictures. Photographers fell off mountains and buildings while “stepping back” for a better view; they were attacked by brigands, scalped by Indians, pursued by robbers, and harassed by “heathens” of every color in practically every country. They were charged by bulls, elephants, and rhinoceroses; mauled by lions and tigers; attacked by alligators and wild dogs. They were shipwrecked at sea and fought for survival in jungles, deserts, and blizzards, and faced battles with armed and irate natives. They faced bullets, deadly snakes, swarms of insects, jealous husbands, and angry customers. They resourcefully reset and splinted their own broken limbs while alone in the wilderness, and turned tragedy into vaudeville by confounding hostile natives with the ‘magic’ of photography. The above list could be endless and it is not a list of fictional possibilities; each case of hardship, tragedy, or survival refers to a specific event in the life of a 19th century photographer. In pursuit of pictures, photographers bravely and recklessly risked, and sometimes lost, their lives—and they did so with such frequency that the cumulative effect of their reports is to understand an aspect of

early photography which is often missing from the history books. This awareness is enhanced by the understanding that the photographic process itself was fraught with difficulties and hardships. It is one thing to be in peril and yet another to be so when encumbered by all the paraphernalia of the wet-plate process. For good reason, this can be called the “Heroic Age” of photography.

The dangers did not diminish with the relief of transporting the hard-won glass plates back to the photographer’s home base (in itself, no mean feat). The darkroom could be a deadly place even for those who never ventured outside the studio. And the dangers of processing and printing are all the more insidious for being unseen and often unrealised, until it was too late. A poison arrow from a band of attacking natives and a poison gas in the comfort of a private darkroom might have the same ultimate effect, but there is a sense of injustice in the fact that danger exists in a personal space. At least the photographer-adventurer had confronted and accepted the risks (and it was these risks which might have spurred his need to travel). A feeling of bewilderment suffuses many of the reports of death in the darkroom, particularly if the cause was sudden and unseen.

It is no exaggeration to state that 19th century photographers ran as many risks in the dark as they did in the act of finding and taking pictures. Practically every

week the photographic press reported an accident or death of a photographer which occurred during his chemical manipulations. The student or historian, reading these journals page by page, cannot escape the strong impression that darkroom health hazards were rife and real.

An omnipresent danger in the darkroom was the risk of poisoning. Throughout the 19th century the photographic process demanded that photographers employ exceedingly dangerous chemicals. Poisonings were so frequent that rarely a week went by without a report of a death in the photographic press. Editorial writers and their expert correspondents incessantly implored their readers to be careful, to observe proper precautions, to understand probable results of inhaling, ingesting or simply handling their chemicals.

One of the most useful, if frightening, contributions was published in *The British Journal of Photography* in 1860, "A Table of Antidotes to the Poisoning Bodies used in Photography (Drawn up from the Most Recent Medical Authorities), by Samuel Highley, F.G.S., F.C.S., etc. Late Lecturer on Medical Mineralogy at the Saint George's School of Medicine, Grosvenor Place, London."<sup>1</sup> Highley prefaces his table with the remark that "the list of deadly poisons employed in photography make (sic) a formidable array" and gives a few preventative tips, such as "During the preparation of gun cotton care should be taken not to inhale the fumes." He then advises his readers how to act in the case of poisoning. He lists twenty-one poisons with their symptoms and recommended treatment. What is frightening about the treatment is that a sense of hopelessness suffuses the remarks. "No antidote" is the sparse conclusion or try "an emetic of mustard in warm water."

Highley was right to emphasize that "prevention is better than cure," particularly when no cure was known. Editorial writers continued to stress the dangers and plead for precaution. Typical of these editorials was one published in *The Photographic News* during the same year,

Perhaps there are few professions connected with the arts of peace, which involve the daily use of so many dangerous and destructive agents as photography. Corrosive acids, caustic alkalis, and deadly salts are its constant familiars. Whilst the dangers consequent upon the indiscriminate sale of poisons have been for some years past constantly impressed upon the public mind, and ingenuity has been taxed to the utmost to enact precautions, and provide bottles of different colours and shapes in which poisons should be vended, the photographer has been able to purchase, unchallenged, cyanide of potassium, bichloride of mercury, and other equally fatal agents sufficient to poison a colony.<sup>2</sup>

The frequent editorials warning photographers of the danger of their chemicals had a predictable outcome. Photographers, especially latent hypochondriacs, became aware of symptoms and were able to blame them on their darkroom processes. Naturally, they wrote long letters to the magazines asking for advice. Typical is the letter from "a sufferer" who listed the following symptoms: "Attacks of biliousness; spasms in the stomach; very acid stomach, and general indigestion." He complained that his life had been a misery for the past nine years: "ever since I began photography."<sup>3</sup> The editor recommended more exercise, regular eating habits, well-ventilated darkrooms and avoidance of taxing the nervous system.

This editorial on "Photography and

Disease” in *The Photographic News* led to an unusually long series of correspondence. Evidently it had touched a highly sensitive spot in the lives of many photographers. The letters of complaints about symptoms and possible cures of illnesses continued in the journal from February to May 1868. These correspondence columns are well worth reading, giving a cumulative impression that, hypochondriacs apart, this was an issue which seriously concerned the professional photographer. Photography as an occupation was, and was known to be, an unhealthy pursuit. It is impossible to quote many of these letters at length but it is worth examining one example as being typical of the rest. The correspondent was J. M. Burgess, who was “well-known in the profession as a skillful photographer of much art and culture—and especially as the inventor of the eburneum process.”<sup>4</sup> Burgess neatly summed up the problems of health hazards in the darkroom:

My own opinion is, that the ill effects cannot be attributed to any one chemical agency, but that they are the result of breathing for several hours every day an atmosphere contaminated with noxious fumes arising from the collodion, developer, and, in some cases cyanide, to which may probably be added, absorption of poisonous substances through the skin, when the system has been already debilitated from over work, both of mind and body.<sup>5</sup>

Burgess then referred to the editorial’s mention of “overtaxing the nervous system.” He felt convinced that photographers were particularly prone to stress arising out of their work—and the strain often resulted in severe physical symptoms:

There is a very great temptation to this in the case of any one who is very fond of the pursuit, and has also to make his

living by it. He is never satisfied with the results he obtains; each improvement only makes him more anxious for higher attainments; hence many hours are spent in thought and experiment; and then, when rest is required, there is the work which must be done. The result is that exercise in fresh air is neglected, and work continued to unreasonable hours. Meanwhile, the excitement and pleasure afforded by the pursuit blind him to any symptoms of injury to the constitution until it is almost too late for recovery; too late, at least, for care and exercise alone to effect a cure. Indigestion, wind spasms, violent colic pains, extreme nervousness, and something like local paralysis are induced, until the sufferer is brought to such a state of weakness as to be unable to digest any solid food. So violent at times is the pain, that the sufferer is convulsed, and symptoms not unlike poisoning by strychnine produced. The face assumes a leaden hue, the limbs become rigid, with the hands tightly clenched, and the back arched, so that the body rests on the back of the head and heels. But is it possible that this can in any way result from the practice of photography?

Burgess answers the question by declaring that his symptoms disappear if he takes a break from photography and has a few weeks holiday in the country, and he therefore concludes that there is a direct link between his illness and his work. This becomes all the more poignant in light of the fact that Burgess died less than five years later—at the age of 31.

A more facetious letter was signed “Hypochondriac” and he reiterated the symptoms of photography-related illnesses, and added a new one—copious bleeding of the nose. This was due, he said, to “my face coming into somewhat rude contact with the hand of a vulgar

boor, whom I endeavored to eject from my angle of view, persuasion having failed."<sup>6</sup>

With this single exception all the letters in this series of correspondence took the matter of health hazards in the darkroom exceedingly seriously. Most of the solutions were of the common-sense variety—better ventilated darkrooms, the use of tongs in dangerous chemical baths, walks in the fresh air, regular meals, frequent washing of the hands, and "to sponge daily with cold water the whole surface of the body"—but a few writers had more specific antidotes to noxious chemicals. A Dr. Napias recommended that photographers drink lemonade or seltzer water "which tend to annihilate the effects of the ether fumes." On arriving home the photographer should down a glass of claret laced with quinine or drink sugar water to which is added a few drops of ammonia or vinegar.<sup>7</sup>

Approaching the problem of poisons from another direction, a Bill was introduced in the House of Lords at the end of this series of correspondence which attempted to restrict the retailing of dangerous substances to registered pharmaceutical chemists. All poisons had to be distinctly labelled. A list of chemicals was drawn up which constituted the poison substances covered by the Bill, most of which were commonly employed by photographers.<sup>8</sup>

During the 1860s and 1870s, there was a good deal of confusion about photographically-related illnesses. No statistical evidence or empirical proof at that time could associate a specific disease with a particular photographic operation. Both Oscar Rejlander and T. R. Williams died from diabetes.<sup>9</sup> A photographic magazine seems to imply that photography may have contributed to

their illnesses and deaths. As late as 1895 a photographic magazine noted that "the frequent appearance of diabetes among photographers is . . . remarkable."<sup>10</sup> Camille Silvy was dangerously sick at one point during his career due to cyanide absorbed through a small cut in his finger while his hands were in the fixing bath. Thomas Sutton attributed "fits of deafness, followed with lethargic sleep"<sup>11</sup> to the inhalation of ether fumes from the collodion process. Throughout the 1870s photographers continued to write long letters to the photographic press listing symptoms which they attributed to their photographic work, giving fellow photographers rules and regulations for healthy lives, and objecting to all the fuss about health hazards. J. H. Fitzgibbon boasted that he had been in the business for thirty-six years, twenty of which were spent in the darkroom:

I suppose I have inhaled enough mercury to make a shining mirror for others to reflect from, and if it could be possible for a chemist to extract the chemicals and compounds that have made acquaintance with the interior of my darkroom, he might get enough ether, alcohol, cyanide, iodine, gold, silver, bichloride of mercury, bromides and chlorides, acids, and other chemicals of minor note, to open a small stock depot at a small cost.<sup>12</sup>

Fitzgibbon challenged anyone to doubt his robust health, by setting in front of him "a plate of good old English roast beef, and a slice of plum pudding thrown in."

In spite of Fitzgibbon's assurances, the vast majority of 19th century photographers were understandably worried about the dangerous chemicals which they daily handled. The journals regularly listed photographic poisons and their suggested antidotes. The following are

typical: "Photographic Poisons and Their Antidotes," *The Photographic News*, 4 May 1877, pp. 207-208; "Poisonous Qualities of some Photographic Chemicals," *The Photographic Times*, Vol. X. 1880, pp. 77-79; "Dangerous Photographic Chemicals," *The Amateur Photographer*, 21 December 1908, pp. 605-606.

"It would seem," said *The Photographic Review of Reviews* in 1895, "that the average dangers which the ordinary soldier has to encounter are not nearly so great as those which beset the photographer's path. It is a wonder that any of us manage to live through it all . . ."<sup>15</sup>

It is worth listing a few of these chemicals, in common use in 19th century photography, which presented such dangers in the darkroom.

During the early years of the medium, the daguerreotype process necessitated the fuming of the plate over heated mercury. And mercury vapor is a deadly poison. As far back as 1797 it was known that small traces of mercury, from, say, a broken thermometer, were enough to kill all plants in a greenhouse. The problem was confounded drastically when daguerreotypists breathed the fumes of mercury placed over a spirit lamp. The photographic magazines attributed many cases of bad health among daguerreotypists to this essential practice. All they could recommend was that the darkroom was well ventilated. Even then, some photographers succumbed. Jeremiah Gurney, one of America's foremost daguerreotypists, was close to death in 1852 due to the effects of mercury. "He has suffered the most acute pain, and been unable to move his limbs; his legs and arms have been swollen to nearly double the ordinary size."<sup>14</sup> The magazine which reported Gurney's illness stated that this was the fourth case of this nature which it had known in the

previous two years. Photographers were warned not to allow any mercury to spill on the floor as "many cases of bad health have been traced to the presence of small quantities of mercury in the cracks in the floor . . ."<sup>15</sup>

Even though mercury poisoning was the most likely cause of illness among daguerreotypists, the fumes of iodine and bromine were far from harmless. Even the copper plates on which the daguerreotype silver image was formed could be dangerous. In 1850 a photographer cut his hand while handling a copper plate—the resultant poisoning necessitated amputation of the hand.<sup>16</sup>

By the mid-1850s, the daguerreotype process had been largely superceded by the collodion process. But even here mercury poisoning was common. Salts of mercury, particularly the bichloride which was called "corrosive sublimate," were "to be found in every photographic studio, being commonly employed for intensifying negatives."<sup>17</sup> Fortunately the wet-plate photographer, who drank his intensifier in error, had a convenient antidote to hand. The recommended treatment for this virulent poison was albumen, or whites of egg, used in the production of his printing paper.

As late as 1901, when the collodion process had given way to the dry-plate, mercury poisonings still took place. In that year, one of Lafayette's assistants drank mercury intensifier by mistake. Even though he was immediately rushed to hospital he died a few days later.<sup>18</sup>

The explosive and flammable dangers of ether vapour have already been mentioned. But an equally real, if less dramatic, health hazard existed for the photographer who breathed ether fumes from his collodion in a hot, cramped and often ill-ventilated darkroom or tent.

Alcohol fumes were also a source of

trouble in the same situation. *The Photographic News* of 1865 published a long article on the toxic effects of these chemicals.<sup>19</sup> The dangers listed were so gruesome that it is a wonder that any photographer ever again practised the collodion process. The only consolation was that the article admitted photographers could become tolerant of the poisonous atmosphere in their dark-rooms through habit. If the plate-coating assistant was rendered unconscious, magazines recommended "sprinkling with water."

Collodion was not only explosive and the source of dangerous ether and alcohol fumes, it also required two other major ingredients for photographic use, both of which were potential health hazards: potassium iodide and silver nitrate.

In 1861 two year old Henry Giblett died after swallowing a bottle of potassium iodide which he found in the van of an itinerant photographer while his guardians were having their portraits taken.<sup>20</sup> A similar case occurred in 1870. A photographer had visited the Stoke-on-Trent Workhouse in order to photograph its governor, Mr. M'Nish, and his family. He left behind a bottle of potassium iodide. When M'Nish asked for a glass of gin, his wife poured from the wrong bottle—and her husband died an hour later.<sup>21</sup> In both these cases the victims were "innocent," unaware of the nature of the liquid which they drank. Photographers would be less likely to make such a mistake and, even if they did, they would be more likely to know the recommended treatment: drinking albumen, starch paste or milk of magnesia. The effects might have been unpleasant but rarely fatal.

It was also true that silver nitrate poisoning rarely killed photographers; it

was not a virulent enough poison to be ingested by the suicidal and its effects could be counteracted to some degree, in the event of accidental swallowing, by the same antidotes recommended for potassium iodide or a good dose of salt water. The fatalities attributed to silver nitrate were usually to the non-photographer. A typical story, with comic undertones, concerned the Abbé Salvy, vicar of a small town in France, who was an enthusiastic photographer. He was transferred to a new parish and asked three of the locals to help move his furniture. The Abbé placed some bottles of cider in the wagon to refresh the men on their journey. He also placed in the wagon a smaller bottle, well-covered and tied up, which he told them they must not touch. The day was hot . . .

"That must be right good stuff, which the *curé* told us not to touch." "No doubt," replied another, "it must be far better than the cider." "Let us try it," said all three. The bottle was produced. The man who took a good sup said it was not good. "See," said he, handing it to one of his companions. The second tried, and pronounced a still more unfavorable opinion. "As it is so bad," said the third, "I shall not have any; let us put back the bottle." Scarcely was this done than the two who partook of the liquid fell on the ground writhing in dreadful agony. In a short time both were dead.<sup>22</sup>

As silver nitrate in the presence of a reducing agent blackens on exposure to light, it had a few bizarre uses. A popular story among 19th century photographers was the image-seeking adventurer in Africa who was captured by natives. The situation looked dangerous. But with admirable presence of mind, he noticed that the chief had a grey beard. He washed the chief's hair in "water," which was in fact silver nitrate, and in a

few minutes the beard was black again. The photographer was hailed as a miracle-worker and set free. The blackening effect of silver nitrate could be used for less salutary reasons. M. Thiebaut was a photographer—and a ladies' man. His wife objected to his adulterous liaisons, and her actions led to a scandalous court case in Versailles in 1860. "It is a long tale of love, jealousy, infidelity, and vengeance," said a reporter.<sup>23</sup> The wife was charged with disfiguring her husband's mistress with photographic chemicals. She admitted that she had been in the habit of carrying a bottle of silver nitrate in her pocket for the purpose of disfiguring her rival. When she learnt that this would blacken the skin, but little more, she switched to a more serious solution. "She subsequently threw a quantity of sulphuric acid over her, and beat her severely with a stick."

Not everyone considered photographic chemicals to be entirely harmful. The French photographer Eugene Ogier claimed that the inhalation of fumes in his darkroom had cured him of pulmonary consumption.<sup>24</sup> F. B. Gage, an experienced American photographer, claimed that silver nitrate had cured his chronic bronchitis.<sup>25</sup> This solution was applied to his throat with a brush. Although this relieved the pain, after a few days the coagulated surface would slough off and the inflammation would begin again. The answer, he found, was to coat the throat with silver iodide—which not only gave temporary relief but the iodine began to cure the inflamed membranes of the throat.

Even the sulphuric acid, used by Mrs. Thiebaut to disfigure her rival, had its medicinal uses. *The Photographic Times* of 1882 asserted that sulphuric acid, in a dilute solution, could cure dysentery, hemorrhages, fevers, ulcerations of the

throat, chronic inflammation of the joints, rheumatism, and skin diseases.<sup>26</sup> It was also useful as a hair invigorator and to remove dandruff as well as prevent undue perspiration of the feet.

Most of the 19th century articles on photographic chemicals were not so hopeful. Death seemed to be an ever-present concomitant of being a photographer. Even the commonly used developer, pyrogallic acid, was a deadly poison. In spite of warnings in more than 30 years of publications, photographers were still susceptible to silly accidents. In 1891 E. C. Tweedy, a well known photographer of Baltimore, met his death by mistaking in the dim light of his darkroom a solution of pyrogallic acid for a glass of whiskey and water. He knew the danger he was in, and immediately took a powerful emetic. To no avail. "In three days he was a corpse."<sup>27</sup> A few years later, Dr. Browning's wife mistook pyrogallic acid for a bottle of medicine. She, too, died.<sup>28</sup>

The photographic journals published more than the usual number of articles warning photographers of the poisonous qualities of bichromates. Potassium bichromate was in "general use in the every day practice of many photographers," mainly in such processes as gum printing, carbon-printing, and practically all photo-mechanical reproductions. As little as fifteen grains of potassium bichromate is enough to cause serious illness. The major problem, however, was not that the solution was ingested, although that too often happened by accident, but that the chemical was inhaled from the polluted air and absorbed through cuts and abrasions in the skin. A fascinating article on the subject was an editorial in an 1864 issue of *The Photographic News*.<sup>29</sup> Almost the same article was used in *The Amateur*

*Photographer* of 1901. Very little had changed in nearly 30 years. Both articles asserted that snuff-takers seemed immune from potassium bichromate poisoning through breathing molecules of the chemical in the air. Both warned photographers about cuts in the skin when placing hands in solutions. The warnings were obviously necessary as carbon printers were particularly susceptible to what was known as “bichromate disease.”<sup>30</sup> A long and detailed article entitled “Poisoning by salts of chromium,” asserts that “cases of poisoning by compounds of chromium are not rare,” and details many specific case histories from eminent medical authorities.<sup>31</sup> Again, there were the odd instances of death due to drinking the chemical in mistake for more refreshing beverages. Thomas Crump, of Scarborough, died in this manner in 1870.<sup>32</sup>

The list of photographic chemicals which caused sufferings and deaths in 19th century photography could be extended almost indefinitely, but there is one last substance which must be mentioned as it accounted for more deaths among photographers than all the other hazards combined: potassium cyanide. This deadly poison, which is particularly noxious in that death occurs so rapidly, was a stock chemical in every photographer’s darkroom. It had two main purposes—as a fixer for negatives, and as a stain remover for spots and blemishes from drippings of silver nitrate.

What is so intriguing, and ironic, is that a harmless fixing salt (sodium thiosulphate, or “hypo”) had been employed from the earliest years of the medium. There seemed to be no good reason why photographers would subject themselves to such a virulent poison as potassium cyanide when an equally efficient and harmless alternative was available.

The editorial writer of *The Photographic Times* in 1880 was equally bemused:

Many people are puzzled, and with good reason, to account for the habit into which numerous photographers have got of using the poisonous cyanide of potassium as a fixing agent, when the innocuous hyposulphite of soda answers the purpose, not merely equally as well but in most instances a good deal better.<sup>33</sup>

It is difficult, if not impossible, to discover where this practice originated, or why. An early textbook by J. B. Hockin, *Practical Hints on Photography: its Chemistry and its Manipulations*, published in 1860, asserts the superiority of potassium cyanide over hypo, and claims the use of cyanide is a “necessity” in the production of positives (such as ambrotypes). He does not give any reasons for these recommendations—and worse, declares that cyanide is only injurious if imbibed. In fact, he declares that its odour is “by no means unpleasant” and “not at all injurious.” This was obvious nonsense, but Hockin’s book may be one of the reasons for the continued use of cyanide over hypo. *Napier’s Metallurgy* outlined the symptoms of poisoning from inhaling fumes from potassium cyanide:

Poisoning by cyanide gives to the mouth a saline taste and scarcity of saliva; the saliva secreted is frothy; the nose becomes dry and itchy, and small pimples are found within the nostrils, which are very painful. Then follows a general languor of body, disinclination to take food, and a want of relish. After being in this state for some time, there follows a benumbing sensation in the head, with pains, not acute, shooting along the brow; the head feels as a heavy mass, without any individuality in its operations. Then there is bleeding at the nose in the mornings when

newly out of bed; after that comes giddiness; objects are seen flitting before the eyes, and momentary feelings as of the earth lifting up, and then leaving the feet, so as to cause a stagger. This is accompanied with feelings of terror, gloomy apprehensions, and irritability of temper. Then follows a rushing of blood to the head; the rush is felt behind the ears with a kind of hissing noise, causing severe pain and blindness; this passes off in a few seconds, leaving a giddiness which lasts for several minutes. In our own case the rushing of blood was without pain, but attended with instant blindness, and then followed with giddiness. For months afterwards a dimness remained, as if a mist intervened between us and the objects looked at; it was always worse towards evening, when we grew very languid and inclined to sleep. Then we rose comparatively well in the morning, yet we were restless, our stomach was acid, visage pale, features sharp, eyes sunk in the head, and round them dark in colour; these effects were slowly developed. Our experience was nearly three years. We have been thus particular in detailing these effects as a warning to all using cyanide; but we have no doubt that, in lofty rooms, airy and well ventilated, these effects would not be felt. Employers would do well to look to this matter; and amateurs, who only use a small solution in a tumbler, should not, as the custom sometimes is, keep it in their bedrooms; the practice is decidedly dangerous.<sup>34</sup>

Although photographers occasionally complained about one or more of these symptoms which they attributed to working in a darkroom with potassium cyanide, far more serious effects were caused by absorbing the cyanide through cuts or abrasions in the skin while fixing plates. The photographic press occasionally reported the suffer-

ings of a photographer whose hands swelled up and were covered in open wounds from this cause. The only solution was amputation. The problem was so real that as early as 1857 John Sang invented a handle for collodion plates in order that the photographers' hands need never be in contact with the cyanide solution.<sup>35</sup> In the same year, one of the major suppliers of cyanide to photographers, Harvey and Reynolds, of Leeds, issued a circular to all their customers "respecting the danger attendant upon the incautious use of cyanide of potassium amongst photographers."<sup>36</sup>

In spite of innumerable warnings, from the 1850s to the early years of this century, photographers continued to die from cyanide poisoning — either by drinking the solution in mistake for some other beverage, or as a quick and certain method of suicide. Only a few examples can be given, from the scores of cases reported in the photographic press.

In 1855 G. W. Greatrex narrowly escaped death when he made a pot of coffee from water which an assistant had polluted with a cyanide solution. Even though the dilution was considerable, Greatrex was still violently sick. But he guessed the cause, threw away the rest of the coffee and drank the recommended antidotes — iron sulphate, powerful emetics, anything that induced vomiting, inhaling the vapour of ammonia, and cold water "poured from some height in a stream on the naked head, neck, and spine."<sup>37</sup> Green tea was also recommended.

These antidotes might well be administered in cases involving extremely dilute solutions. Otherwise, the effect of cyanide is so sudden that nothing will help. This was true in the case of a German photographer in 1860. He was

cleaning a glass plate, with difficulty. He got angry. He "became suddenly transported with passion, and, in his madness, dashed the plate on the floor, and seizing a vessel of cyanide of potassium, poured it down his throat. He dropped as if he was shot, and died in half a minute."<sup>38</sup>

In 1865 *The Photographic News*, in reporting two more suicides from cyanide, commented that such deaths are "becoming lamentably common."<sup>39</sup> The next month it reported the death of G. Cameron Hodgson, a photographer from Sunderland, who sipped his fixer after becoming maudlin drunk.<sup>40</sup> Within a few months it asked: "When will cyanide be banished from the photographer's laboratory? Every week we hear of somebody being either maimed, paralysed, or killed by this deadly, and, to a photographer, totally unnecessary poison."<sup>41</sup>

Ignorance and carelessness continued. A photographer reported that he visited a druggist to buy some cyanide and the chemist found one lump was too large to enter the neck of the bottle—so he bit it into two pieces! "Nothing but very prompt measures saved his life."<sup>42</sup> Carelessness caused the deaths of innocents, often the children of photographers. A photographer named Kenneth, of Lochee, Scotland, saw his child drink from a phial of cyanide but he was too late to save it.<sup>43</sup> Other deaths of children from cyanide continued to be reported with alarming frequency.<sup>44</sup>

In 1866, Frederick Poller, aged 28, died from inhaling hot potassium cyanide fumes<sup>45</sup>; in 1867 a photographer's lady assistant committed suicide by drinking the fixer<sup>46</sup>; in 1868 a lady poisoned herself in New York by taking a dose of cyanide in mistake for rhubarb(!)<sup>47</sup>; in 1869, Frederick Guinness died from drinking cyanide in mis-

take for a medicine<sup>48</sup>; in 1870, Elizabeth Lyons committed suicide after a quarrel with her lover, a photographer named Bocock of Liverpool<sup>49</sup>; in 1871, Cordine Gee, daughter of a photographer, in a burst of temper through a trivial domestic quarrel, ran to her father's darkroom and swallowed cyanide<sup>50</sup>; in 1872, Charles E. Pelton, a young photographer, was eating cloves which laid on the darkroom shelf. He picked up a piece of cyanide by mistake<sup>51</sup>. And so on, week after week, year after year. The overriding impression from reading so many of these reports is that the suicides were often for trivial reasons and that if cyanide had not been so readily available, the victims would certainly have recovered enough from their grief, spite, rage, or jealousy, to continue life quite happily. The accidents were also wasted lives when such a harmless alternative as hypo was not only available but recommended by many editors.

Magazines constantly affirmed that there was no good reason for potassium cyanide to be used in any photographic darkroom.

This fact makes the death of Professor Fischer, of Czechoslovakia, all the more melancholy. Although he was only twenty-five years of age, he had gained a reputation as being "of the highest eminence in his profession," and occupied the Chemical Chair at the Prague High School. An ardent experimentalist, he had conceived the idea that the poisonous properties of cyanide could be neutralised without affecting its efficiency as a fixing agent. He mixed his solution in the laboratory in the Gymnasium of Prague, turned to his assistant and said: "Science has now so far advanced as to be even able to render harmless so dangerous an agent as cyanide of potassium.": With these words he drank the

mixture — and died within minutes “with the most violent and excruciating agonies.”<sup>52</sup>

There is some suggestion that Fisher might have committed suicide under the guise of a scientific experiment. This seems unlikely, but if true, he was more successful than the photographer satirized in the popular jingle *The Ballad of Billy Baker*.<sup>53</sup> In this ballad, sung to the tune “One-horse Shay,” William Baker “*carte-de-visite* taker,” falls in love with one of his sitters, Jemima Jenkins. She will have nothing to do with poor Billy Baker, who decides to take cyanide:

On suicide intent,  
To the darkroom then he went;  
But instead of cyanide he swallowed  
th' hypo.  
Although it gave him pain,  
He soon got well again,  
But never flirted after in his stu-di-o.

The moral was clear: keep bottles properly labelled otherwise when you want to kill yourself you may drink the wrong solution.

When Jemima rejected Billy Baker's love she said: “Take such black paws as those/with heart that's quite as black, for anything I know,” and struck a blow at every 19th century photographer's weak spot. The reason why Billy had “black paws” was that his hands were stained with silver solutions, which, as has been mentioned, turned everything black with which it came into contact. Queen Victoria did not allow photographers to use the wet-plate process in any royal residence, as soon as a dry process became practical, as the silver bath drippings ruined the carpets. The most common method of removing these black marks, from hands and furnishings, was to scrub them with potassium cyanide. Photographers had the habit of rubbing their fingers with solid lumps of cyanide,

at the end of each day's work. Although risky, “photographers do it every day,” claimed *The Photographic News* before reporting the death of a Belgian photographer.<sup>54</sup> He had no apparent cut on his hands so proceeded to remove the black silver with a lump of cyanide. A little piece of the lump chipped off and pushed under his finger nail where it broke the skin. He died in a few hours.

In spite of constant warnings that cyanide could be absorbed through the skin, photographers continued to use their hands in the solution. Usually, they escaped harm; often they suffered badly. One photographer wrote:

I have not yet been able to resume my work in the chemical room. The last few weeks I have passed at the Springs, trying to extract the poison from my hands, which pain me so much that I have been obliged to keep them constantly in cold water. The first apparent effect of the poison was a feeling of numbness after using cyanide. This would soon pass away by a little friction in rubbing both hands together. I did not even then think of any further injurious effect. After some time this was followed by an eruption on the joints and between the fingers, accompanied by a constant itching sensation. This soon increased, until both hands were covered with watery blistering sores, and the itching pain became so intolerable that no words can describe the torture, which could only be borne by keeping both hands in cold water.<sup>55</sup>

Cyanide sores on the hands were a common complaint of photographers. The recommended treatment was rain-water. Several photographers on both sides of the Atlantic claimed to have been cured by this method. A typical letter reads:

The winter of 1867-68 I had cyanide sores on my hands for several weeks.

My family physician failed to heal them. I then, on going to bed, wrapped my hands in muslin wet in rain-water, and kept them wet all night from a dish by my bed. After three nights' treatment in this way they were well.<sup>56</sup>

Such cures might or might not have worked but it seems strange that photographers continued to expose their hands to the risk of cyanide sores when safer hand cleaning solutions were available. For example, in 1868, M. Carey Lea wrote an article on "Poisoning by External Use of Cyanide of Potassium" in *The Philadelphia Photographer* in which he states "there is no recognised treatment for such troubles." He suggests prevention, by avoiding cyanide to remove silver stains. He recommended a solution of potassium bichromate, 1 part; hydrochloric acid, 2 parts; water, 20 parts. Once this has removed the silver stains, rinse the hands in sodium thiosulphate (hypo) and wash with soap and water.

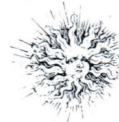
A similar method was recommended in "A Safe Method of Removing Silver Stains from the Skin," in *The Photographic Times* in 1881.<sup>57</sup>

Not everyone agreed that an alternative to cyanide was necessary. E. P. Ogier, for example. He was a writer from St. Heliers', Jersey, who suffered from bronchitis which, he believed, was turning into consumption. His doctor advised more manual labour, so he became a photographer. He not only used cyanide for fixing but also for cleaning his hands, using a particularly strong solution and often rubbing the stubborn stains with a pumice stone. The abrasions absorbed the cyanide: "In a couple of months the serious symptoms with which I had been troubled had passed away, and now for three years I have enjoyed, relatively speaking, perfect health. My chronic bronchitis even, that had troubled me so

long, almost disappeared."<sup>58</sup> The next week, D. Welch, a photographer from Newry, Ireland, also attributed the relief of his consumption to photography.

But apart from these isolated examples of the beneficial effects of potassium cyanide, the overwhelming mass of evidence condemned the use of this chemical in photographic darkrooms.

Potassium cyanide was not an *essential* ingredient in 19th century photography—yet it accounted for hundreds, and probably thousands of deaths. In many respects it represented a puzzling phenomenon of almost willful masochism—yet it led to small news items which readily bring to the senses the *zeitgeist* of an age. Historians constantly write about and talk about the establishment figures, the rich and famous among 19th century photographers, those whose names regularly appeared in the photographic press. The suicides of failures remind us that there was another, more shadowy and insubstantial, but none the less equally human side of the medium. So, just for the record, let one essay on photographic history mention the name of W. Dickson. In April 1883, he was 40 years old. He was discovered by a policeman on the east side of Calton Hill, near Edinburgh, far from his home town. An envelope was found in one of his pockets. On it was written: "Have no work, no money, no friends and no place to sleep in tonight.—W. Dickson, Photographer, April 12, 1883." Alongside the body was a small bottle of potassium cyanide.<sup>59</sup>



## Notes

- <sup>1</sup>*The British Journal of Photography* (London), 1 June 1860, pp. 160-161.
- <sup>2</sup>*The Photographic News* (London), 19 October 1860, p. 290.
- <sup>3</sup>*The Photographic News*, 28 February 1868, p. 98.
- <sup>4</sup>*The Photographic News*, 31 January 1873.
- <sup>5</sup>*The Photographic News*, 6 March 1868, p. 117.
- <sup>6</sup>*The Photographic News*, 20 March 1868, p. 143.
- <sup>7</sup>*The Photographic Times* (London), Vol. IV, 1874, pp. 124-125.
- <sup>8</sup>*The Photographic News*, 29 May 1868, p. 263.
- <sup>9</sup>*The Photographic News*, 19 February 1875, p. 90.
- <sup>10</sup>*The Photographic Review of Reviews* (London), January 1895, p. 22.
- <sup>11</sup>*The Photographic News*, 19 September 1876, p. 458.
- <sup>12</sup>*The Photographic News*, 16 March 1877, p. 129.
- <sup>13</sup>*The Photographic News*, 16 March 1877, p. 129.
- <sup>14</sup>*Humphrey's Journal* (New York), Vol. IV, 1852, p. 28.
- <sup>15</sup>*The Photographic News*, 16 August 1867, p. 399.
- <sup>16</sup>*The Daguerreian Journal* (New York), Vol. 1, 1850, p. 228.
- <sup>17</sup>*The Photographic News*, 26 January 1877, p. 37.
- <sup>18</sup>*The Amateur Photographer* (London), 12 July 1901, p. 36.
- <sup>19</sup>*The Photographic News*, 24 February 1865, pp. 86-88.
- <sup>20</sup>*The Photographic News*, 15 November 1861, p. 550.
- <sup>21</sup>*The Photographic News*, 7 January 1870, p. 11.
- <sup>22</sup>*The Photographic News*, 10 July 1868, p. 335.
- <sup>23</sup>*The Photographic News*, 7 December 1860, p. 384.
- <sup>24</sup>*The Photographic News*, 2 February 1872, p. 50.
- <sup>25</sup>*Ibid.* pp. 50-51.
- <sup>26</sup>*The Photographic Times* (London), Vol. XII, 1882, pp. 99-100.
- <sup>27</sup>*The Photographic News*, 22 May 1891, p. 384.
- <sup>28</sup>*The Photographic Review*, October 1896, p. 326.
- <sup>29</sup>*The Photographic News*, 24 June 1864.
- <sup>30</sup>*The Amateur Photographer*, 22 March 1901, p. 230.

<sup>31</sup>*The Photographic News*, 16 September 1887, pp. 578-580.

<sup>32</sup>*The Photographic News*, 11 March 1870, p. 119.

<sup>33</sup>*The Photographic Times*, Vol. X, 1880, p. 17.

<sup>34</sup>Quoted in *The British Journal of Photography*, 20 December 1867, p. 609.

<sup>35</sup>*Journal of the Photographical Society* (London), 21 September 1857, pp. 33-34.

<sup>36</sup>*Journal of the Photographic Society* (London), 21 September 1857, pp. 33-34.

<sup>37</sup>*The British Journal of Photography*, 1 June 1860, p. 160.

<sup>38</sup>*The Photographic News*, 9 November 1860, p. 335.

<sup>39</sup>*The Photographic News*, 17 March 1865, p. 131.

<sup>40</sup>*The Photographic News*, 21 April 1865, p. 192.

<sup>41</sup>*The Photographic Journal* (London), 16 November 1865, p. 200.

<sup>42</sup>*The Photographic Journal*, 16 November 1865, p. 200.

<sup>43</sup>*The Photographic News*, 1 January 1875, p. 12

<sup>44</sup>For examples: *The Photographic News*, 2 November 1866, p. 527; *The Philadelphia Photographer*, Vol. IV, 1867, p. 403; *The Photographic News*, 22 November 1867, p. 568.

<sup>45</sup>*The Photographic News*, 17 August 1866, p. 388.

<sup>46</sup>*The Photographic News*, 17 May 1867, p. 240.

<sup>47</sup>*The Photographic News*, 3 January 1868, p. 457.

<sup>48</sup>*The Photographic News*, 11 June 1869, p. 288.

<sup>49</sup>*The Photographic News*, 19 August 1870, p. 395.

<sup>50</sup>*The Photographic News*, 8 September 1871, editorial.

<sup>51</sup>*The Photographic News*, 21 June 1872, p. 299.

<sup>52</sup>*The Photographic News*, 20 September 1878, pp. 445, 450-451.

<sup>53</sup>*The British Journal of Photography*, 7 February 1868, p. 66.

<sup>54</sup>*The Photographic News*, 22 October 1875, p. 505.

<sup>55</sup>*American Journal of Photography*; quoted in *The Photographic News*, 12 October 1866, p. 487.

<sup>56</sup>*The Photographic News*, 18 March 1870, p. 131.

<sup>57</sup>*The Photographic Times*, Vol. XI, 1881, pp. 182-183.

<sup>58</sup>*The Photographic News*, 16 June 1871, pp. 277-278.

<sup>59</sup>*The Photographic News*, 20 April 1883, p. 256.