

Gila Monster



Heloderma

« Les indigènes considèrent la morsure de l'Héloderme comme excessivement dangereuse et la redoutent à l'égal de celle des serpents les plus venimeux, tels que le *Tepoxo* (*Bothrops atrox*) ou le *Mazacoatl* (*Atropos mexicanus*). »

(F. Sumichrast, 1864)

“My right arm is chilly from the arctic rays. My feet are cold, and the coldness creeps up higher in my legs. A great deal of arctic feeling in and around my heart. My breath is cold. Cold chills run over me in various parts of my body. My hands tremble very much at times, so that I cannot write. Pain in testicles and coldness, as if they were frozen.”

(Robert Boocock, 1893)

"If king and queen of the world could offer millions for a moment of time, then I have in this remedy a means of arresting death on its flight in heart failure and paralysis of the lungs.

What else will come from it God only knows."

(Robert Boocock 1894)

“The Indians think the Helodermas produce good or bad weather; they talk to the storm-spirit and send wind, water of fire.”

(Thomas Bradford, 1895)

“The sensation of coldness, attributed to no known cause, may prove the keynote to this remedy, which may become, after further provings and experience, a second lachesis.”

(Thomas Bradford, 1895)

"Among the Yuma Indians is a squaw who was bitten by one of these reptiles over thirty years ago. What decoction was given to the woman to save her life, or what the army physician at the United States garrison there did for the poor savage is not known, but she is pointed out by whites and Indians in the town of Yuma as the only person in that locality that ever survived the poison of the Gila monster. This woman's leg, which was bitten, has shrivelled away to half the size of the other leg, and the squaw has been a semi-idiot since her accident. For several years she claimed to be deaf from the effects of the reptile's venom.

Where the afflicted person survives an hour or two after the bite the agony is described as awful to witness. The venom of the rattlesnake is somewhat numbing in its effect, and after the first half hour is not so very painful, but the poison of the Gila monster goes through the human system with lightning rapidity, and causes unspeakable pain and excruciating agony from head to foot. The victim seems to be paralyzed, and yet every muscle, bone, sinew and particle of gray matter is keenly alive to intense pain. The sufferer's head seems as if it would split open. Very few persons bitten by a Gila monster can speak after the first fifteen minutes, but unconsciousness seldom comes until a few minutes before death. Physicians say that the poison sets up a tremendous action of the heart, and the victim really dies of heart failure."

(The New York Sun 1896)

“In heart failure, which I take to be a paralysis of this class of nerves sympathetic, it has brought back many to life. When there has been evidence of the heart ceasing to act, no pulse perceptible, breathing cold and almost gone, I have in three cases seen them brought back to life by moistening the tongue with a little water in which a small powder of the 200th was dissolved. One described it as if he had gone away and were brought back from a distance to recognize sounds and words."

(Robert Boocock 1899)

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Heloderma suspectum

Das Tier / The Animal

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1864 - *Heloderma horridum*, le Tola-chini des Indiens Zapotèques - F. Sumichrast

Famille des VARANIDES. - Genre HELODERMA, Wagler. - *Heloderma horridum*, Wagl., Wieg. - *Escorpion* des Créoles. ⁽¹⁾ - *Tola-chini* des Indiens Zapotèques.

« Ce singulier saurien, unique représentant américain de la famille des Varanides, habite exclusivement la zone chaude qui s'étend du revers occidental de la Cordillère jusqu'aux rivages de l'océan Pacifique ; il n'a jamais été rencontré, à ma connaissance, sur la côte du golfe mexicain. Ses conditions d'existence le confinent dans les localités sèches et chaudes, telles que les cantons de Jamiltepec, Juchitan, Tehuantepec, etc.

(1) On applique généralement au Mexique le nom de *Escorpion* à tous les Sauriens dont la morsure est considérée comme venimeuse.

Il est d'autant plus difficile d'observer les mœurs de l'Héloderme que cet animal, grâce à la vie sédentaire que lui imposent ses habitudes semi-nocturnes, échappe à une investigation suivie. Ajoutons que la frayeur extrême qu'il inspire aux indigènes n'a pas peu contribué à laisser son histoire dans l'obscurité. La démarche de ce reptile est excessivement lente et embarrassée, ce qu'expliquent du reste le peu de longueur et l'épaisseur relative des membres, aussi bien que le manque de flexibilité des articulations. Chez les individus très-vieux ou chez les femelles avant la ponte, le ventre acquiert un grand développement dans le sens latéral et traîne sur le sol, difformité qui ne laisse pas d'ajouter encore à l'aspect repoussant de cet être bizarre.

Ce sont, pour l'ordinaire, des trous plus ou moins profonds, creusés au pied des arbres ou sous un amas de débris végétaux, qui servent de retraite à l'Héloderme. C'est là qu'il demeure, pendant la plus grande partie du jour, enroulé sur lui-même et dans une immobilité presque complète. Il ne sort guères de cet état de torpeur que le matin avant le jour, ou le soir, aux heures où les insectes terricoles rampent sur les sentiers des bois. Ainsi que le font pressentir la gêne et la lenteur de ses mouvements, l'Héloderme ne peut s'attaquer qu'à une proie facile. Sa nourriture se compose essentiellement d'insectes aptères, de lombrics, de myriapodes, de petites espèces de batraciens et parfois même de matières animales en putréfaction. Il est friand des œufs d'iguanes et il n'est pas rare de le rencontrer rôdant près des trous creusés dans le sable, où ces œufs ont été abandonnés à l'action des rayons solaires.

L'Héloderme est un animal *terrestre*, dans toute l'acception de ce mot, et son organisation est en rapport intime avec son genre de vie. Sa queue, arrondie et pesante, ne pourrait en aucune manière lui servir d'instruments de natation, et ses doigts courts et épais ne sauraient lui permettre de grimper aux arbres. Aussi n'est-ce point dans le voisinage immédiat des rivières ou dans l'épaisseur des forêts qu'il faut chercher ce reptile, mais plutôt dans les endroits secs, à la lisière des bois ou dans les anciens défrichements, dont le sol est couvert de débris végétaux, de troncs pourris et de graminées. Sans avoir de preuves positives à cet égard, je ne serais pas éloigné de croire que ce saurien demeure, pendant un espace de temps plus ou moins long,

plongé dans une sorte de léthargie estivale assez analogue à celle qu'on a observée chez les Alligators, en certains cantons de l'Amérique. Ce qui me conduit à cette supposition, appuyée d'ailleurs par ce que j'ai entendu dire aux indigènes, c'est que pendant la saison sèche (de novembre en juin) on rencontre très-rarement ce reptile, qui ne se laisse voir avec quelque fréquence que dans le temps des pluies.

Le corps de l'Héloderme exhale ordinairement une odeur forte et nauséabonde, dont l'intensité augmente à l'époque où les deux sexes se recherchent pour l'accouplement. Quand l'animal est irrité, il s'échappe de sa gueule une bave gluante et blanchâtre, secrétée par des glandes salivaires très-développées. Si on le frappe dans ce mouvement de colère, il finit par se renverser sur le dos, ce qui fait dire aux Indiens, comme un précepte à suivre en pareille circonstance: *qu'il faut toujours attaquer le scorpion de face, parce qu'il pique en arrière*. Cette manœuvre singulière, que l'Héloderme répète presque chaque fois qu'il est menacé, est accompagnée de soufflements profonds, aspirés avec force du gosier, et d'une sécrétion abondante de la salive gluante dont nous avons parlé.

Les indigènes considèrent la morsure de l'Héloderme comme excessivement dangereuse et la redoutent à l'égal de celle des serpents les plus venimeux, tels que le *Tepoxo* (*Botrops atrox*) ou le *Mazacoatl* (*Atropos mexicanus*)⁽²⁾. On m'a cité, à l'appui de cette prétendue propriété malfaisante, un grand nombre d'accidents, survenus ensuite de morsures de l'animal ou arrivés à des personnes qui auraient mangé sa chair, la prenant pour celle de l'iguane. J'aurais désiré pouvoir faire à cet égard quelques expériences concluantes ; malheureusement tous les exemplaires de l'Héloderme que j'ai pu me procurer pendant mon séjour dans les contrées qu'il habite, étaient tellement maltraités que la chose devenait impossible. Sans donner du reste le moindre crédit aux récits que j'ai recueillis des indigènes, je ne suis pas absolument éloigné de croire que la bave visqueuse qui découle de la gueule de l'animal, dans les moments d'excitation, ne soit douée d'une âcreté telle qu'elle ait pu, introduite dans l'économie, y occasionner des désordres dont la gravité aura sans doute été fort exagérée.

(2) Le *Tepoxo* ou *Tepocho* est assez commun dans la plupart des régions subalpines du Mexique ; l'espèce est sujette à un grand nombre de variations.

Le *Mazacoatl*, ce non signifie *serpent-cerf* (da Mazatl, cerf et coatl, serpent); il lui a été donné à cause des écailles redressées en forme de petites cornes qui hérissent le bord supérieur des sourcils. Cet ophidien, moins commun que le précédent, habite aussi bien les terres chaudes et tempérées, que les régions plus froides.

L'épaisseur des téguments qui protègent le corps de l'Héloderme et la dureté des tubercules écailleux dont ils sont recouverts, le rend presque insensible aux coups les mieux assés et la mort ne survient d'une manière instantanée qu'à la suite de blessures profondes faites avec un instrument tranchant ou une arme à feu. Le mouvement musculaire persiste fort longtemps après la mort, chez ce reptile, et s'il fallait en croire ce que rapportent les Indiens, il se prolongerait jusqu'à quarante-huit heures ou plus dans la tête séparée du tronc.

La couleur des taches semées sur le corps et les membres de l'*H. horridum* est sujette à des variations, dues à l'âge ou à la différence des localités. Ces taches passent du jaune blanchâtre au rouge-brun par une série de nuances intermédiaires; leur disposition, assez inconstante, ne peut guères fournir de caractères descriptifs précis. L'âge apporte aussi de grands changements dans la taille; elle atteint, chez quelques individus, jusqu'à près de cinq pieds. »

(F. Sumichrast, Note sur les mœurs de quelques reptiles du Mexique, Archives des sciences physiques et naturelles, tome 19, Genève 1864, *Heloderma horridum*, p. 45-49)

1878 - Die Krustenechse - Alfred E. Brehm

„Die Krustenechse, Escorpion der Kreolen, Tola-Chini der Azteken (*Heloderma horridum*) vertritt eine besondere Sippe (*Heloderma*) und mit einigen anderen verwandten Gruppen eine eigene Familie (*Trachydermidae*), deren Merkmale folgende sind: Der Leib ist gedrunken, der Schwanz rund und lang, die dritte Vorder- und Hinterzehe mit der vierten länger als alle anderen, das Trommelfell sichtbar; die wulstig gekielten oder gekörneltten Schuppen stehen in Querreihen; die Zunge teilt sich vorne in zwei kurze, glatte Spitzen; die Zähne haben keine Höhlung an der Wurzel; die Schläfengrube wird von Hautknochen überbrückt.

Erwachsen erreicht die Krustenechse eine Länge von 1,6 Meter. Ihrer Gestalt nach kommt sie am nächsten mit den Waranen und Ameiven überein, ist aber plumper gebaut und durch den dicken, runden Schwanz hinlänglich unterschieden. Der platte, vorne abgestumpfte Kopf trägt auf dem Scheitel erhabene, rundliche Schuppen; der Leib und die übrigen Teile sind mit perlähnlichen Schüppchen bedeckt; das ganze Fell fühlt sich deshalb rau und körnig an. Die kegelförmigen, geraden, spitzigen Zähne, welche im unteren Kinnladenrande befestigt sind, haben am Innenrande der Vorderseite eine deutliche Furche. Die dunkel- oder erdbraun gefärbte Haut der Oberseite ist mit kleinen, nach Alter und Spielarten verschiedenen, von Weißgelb bis zu Rotbraun abändernden Flecken gezeichnet; den Schwanz ringeln mehrere dunkle Binden; die Unterseite zeigt auf hornbraunem Grunde gelbliche Flecken.

Deppe's kurze und inhaltlose Lebensschilderung der Krustenechse ist neuerdings durch Sumichrast in jeder Beziehung vervollständigt worden. Die absonderliche Echse lebt, nach Angabe des letztgenannten Beobachters, ausschließlich auf der Westseite der Kordilleren, bis zum Stillen Weltmeere hinab, und zwar nur in trockenen Gegenden, scheint auch freiwillig niemals ins Wasser zu gehen. Sie ist ein Nachttier, bewegt sich langsam und schwerfällig und schleppt, wenn sie alt geworden ist oder trächtig geht, den schweren Leib auf dem Boden. Den Tag über verbirgt sie sich in selbst gegrabenen Löchern am Fuße der Bäume oder unter Pflanzenresten und liegt hier unbeweglich, in sich zusammengerollt. Abends kommt sie zum Vorschein und jagt nunmehr auf allerlei Kleingetier: ungeflügelte Kerfe, Regenwürmer, Tausendfüßer, kleine Frösche und dergleichen, welche sie namentlich auf Waldpfaden ertappt, oder gräbt die Eier der Leguane aus, verschmäht selbst bereits in Fäulnis übergegangene Stoffe nicht. In der Regenzeit begegnet man ihr am häufigsten, in den Monaten November bis Juni am seltensten; es scheint daher, daß auch sie Sommer- oder, da die Zeit der Hitze und Dürre unseren kalten Monaten entspricht, Winterschlaf halte wie viele andere Kriechtiere in Mittel- und Südamerika.

Der sehr starke und ekelhafte Geruch, welchen die Krustenechse verbreitet, steigert sich zur Paarungszeit noch wesentlich. Wenn man sie reizt, trieft ihr weißlicher kleberiger Geifer aus dem Maule, welcher von den sehr entwickelten Speicheldrüsen abgesondert wird; wenn man sie berührt, wirft sie sich auf den Rücken, gerät, wie ihre beschleunigten Atemzüge beweisen, in Zorn, läßt ein tiefes Zischen wahrnehmen und geifert noch heftiger als vorher. Diese Eigenschaften, welche sie mit Kröten und anderen Lurchen gemein hat, sowie ihre Hässlichkeit haben ohne Zweifel das Vorurteil der Eingeborenen hervorgerufen, unter welchem das auch nach Sumichrast unschuldige, das heißt nicht giftige Tier zu leiden hat.

Börsch erhielt, wie er mir schreibt, während seines Aufenthaltes in Mexiko eine Krustenechse lebend, nachdem er die allgemeine Furcht der Eingeborenen durch das Versprechen einer guten Belohnung beschwichtigt hatte. Das endlich eingefangene Tier kam in einer starken Kiste an, in welcher auch Früchte enthalten waren, weil sonst kein Maultiertreiber es mitgenommen haben würde. Börsch warf ihm die mitgegebenen Früchte, Kerbtiere, kleine Eidechsen, Eigelb und rohes Fleisch vor; es fraß aber nur von letzterem und trank ein wenig Wasser. Um festzustellen, ob sein Biss, wie der allgemeine Aberglaube behauptet, tödlich vergifte, versuchte man, es durch vorgehaltene Eidechsen zu reizen. Es berührte diese nicht, ließ sich durch sie

auch nicht aus seiner Ruhe bringen, biss aber einen der Beobachter, als derselbe es mit der Hand berühren wollte, tüchtig in den Finger, späterhin auch einmal Börsch selbst. Beider Wunden bluteten und schmerzten stark, heilten jedoch ohne alle Zwischenfälle und erwiesen den Ungrund der Volksmeinung zur Genüge.

Die Krustenechse stirbt laut Sumichrast, nur infolge von Schnitt- oder Schusswunden; denn ihre harte Haut macht sie fast unempfindlich gegen jeden Schlag. Ihre Muskelreizbarkeit erhält sich aber bis zu achtundvierzig Stunden nach dem Abtrennen ihres Kopfes vom Rumpfe. Börsch tötete seine Gefangene binnen zwanzig Minuten durch Chloroform.“
(Alfred E. Brehm, Brehms Tierleben, 2. Auflage, 3. Abtheilung - Die Kriechthiere und Lurche, Leipzig 1878, Die Krustenechse, S. 182-183)

1890 - The Gila Monster, a mysterious and dreaded lizard - John A. Spring

“The Gila Monster (*Heloderma horridum*), which lives in the valleys and sandy plains of Arizona and Sonora, is called by the native Mexicans *Escupion*, which means ‘Spitter,’ derived from the Spanish verb *escupir*, to spit. It has at all times given rise to many seemingly improbable stories, and excited considerable curiosity; so it may not be amiss to take a closer look at the mysterious object in the light of recently-developed facts, and an experience of many years spent in the regions of this animal's habitat. The lizard - for such it evidently is - varies in length from fifteen to thirty inches, and has a heavy rounded body, which touches the ground when the animal creeps along, unless enraged, when it assumes a more erect posture, moves quicker, and begins to spit. Its colouring is like that of a rattlesnake, black figuring on yellow, the entire body being apparently scaly, though in reality the whole skin is composed of small particles, closely joined together, like an embroidery-work of beads. It is the only one of the lizard family that is extremely venomous.

Mr. Paul C. Brown, in a most interesting recent article, says that the long-debated question as to the venomous nature of the Gila Monster was brought up at a late meeting of the College of Physicians at Philadelphia. Drs. Mitchell and Reichart had on hand live vigorous specimens of the lizard. Dr. Mitchell caused one to attack the edge of a dish, and some of the saliva was caught in a watch-glass. This was first tested. The venom of poisonous reptiles is acid, but this was alkaline. A minute quantity was then injected into a live pigeon, which died in less than nine minutes. Other experiments were tried which demonstrated the dangerous character of the poison. According to these learned doctors, ‘rattlesnake poison is a bagatelle in comparison.’

The writer's personal experience with this saurian, which covers a period of over twenty-two years, may be condensed into the following facts. In 1867, while in the employ of the United States Quartermaster Department, I was stationed at Fort Wallen - since abandoned - in the Territory of Arizona, on the upper San Pedro River, and having considerable leisure time, I occupied myself frequently in collecting tarantulas, centipedes, snakes, campamochas, &c., and studying their habits. One day during the summer, our mail-rider from Tucson reported to me that he had met on his home-trip - in fact, that very morning - with a horrible animal, at sight of which his horse shied (precipitately, almost unseating him. He quieted the horse, which, although trembling in every limb, came to a stand. Before the rider had time to pull his revolver and take aim, the strange animal disappeared among the rocks which line both sides of the road at that place. He described the animal as about four feet long, and not unlike a young caiman or crocodile (the rider was a native of Louisiana). We had at the fort several Mexicans, employed as brickmakers and herders; and upon their hearing his imperfect description, they came unanimously to the conclusion that he had seen an *escupion*; only they

shook their heads at the alleged size of the animal, all stating that they had never seen one exceeding a *vara* (thirty-three inches) in length.

In the evening I called these men to the office, and offered them five dollars for a live specimen, and half that amount for a dead one, not mutilated to any great extent. On the following Sunday two of them started out, and towards evening brought in a Gila Monster twenty-eight inches in length, which they had lassoed while it was asleep, or apparently so, on the sunny surface of a large rock, which allowed them to crawl up from behind unperceived and to throw the noose over its head. They were carrying it between them, hanging from a *Cereus* pole, the ends of which rested on their shoulders, leaving between the dangling animal and its carriers a distance of at least six feet. Still they appeared to me to be uncomfortable, and as soon as I approached - in my ignorance and eagerness - somewhat close to the reptile, they both burst out with: 'Por Dios, señor, cuidado!' (For God's sake, sir, take care!)

There being an empty grain-room about the place, I lodged the saurian in it, attached to a raw-hide rope fastened to an iron picket pin, giving him about four feet playroom. This I did with the help of my two Mexican friends, armed with long blacksmith's tongs, while they continually cautioned me to look out for my fingers and keep out of reach of the animal's spittle. After paying the men, I sent for something from the sutler to compose their nerves, in order to ascertain from them the cause of their abject fear. Their stories mainly coincided with those of the other Mexicans and Indians whom I have interrogated upon the subject since, and though but hearsay evidence, I would state that these reports may be accepted as facts, the narrators being men of unquestionable veracity, and my later experiments bearing them out in their assertions.

A woodcutter who had lain down in complete health to sleep, wrapped up in his blanket, failed to arise in the morning, when his co-labourers called him. Upon uncovering him they found him stone-dead, and near his body a Gila Monster, which, in the bustle and confusion of the moment, made good his escape. The body of the man bore no mark of a bite or other wound.

Near Magdalena, Sonora, a man was hunting rabbits with a dog. The latter inserted his snout into a rabbit hole, but immediately retreated, uttering fearful howls while he was trying to shake off a Gila Monster which had fastened its teeth into the dog's nose, and, although snarling and spitting without interruption, could not be made to let go its hold till it was killed, and even then its jaws had to be forced apart with an iron rod. The dog, upon being released, began to act very strangely, and showed something like the same symptoms as a horse does when suffering from the 'blind staggers;' but soon began turning around itself in a circle with the head for its centre, and in about twenty minutes fell down dead. The same actions before death were observed in a mule, only this animal was bitten in a hind-leg, and lived for several days.

A young miner while prospecting was bitten just above the shoe. Although previously in the best health, he at once began to lose flesh, became melancholy, and died after a few months in the manner of those who succumb to what in Germany is called the galloping consumption.

If space allowed, I could enumerate many similar cases, more or less authenticated; but suffice it to say, that among the natives the universal belief is that the spittle or saliva, and even the mere breath and exhalation, of the animal in an excited state is deadly poison. I have been told by many Mexicans that the Yaqui Indians hunt the Gila Monster for the sake of its flesh, which is indeed appetising enough to look at; but several Yaquis to whom I spoke about the matter have denied the assertion.

After this digression, let us return to my prisoner in the grain-room. The reader may imagine that, after the repeated cautions I had received from its captors, I personally gave the animal a

wide berth, although I tried to induce a pointer, which we kept for hunting quail, to investigate the nature of the new-comer's temper. When the dog perceived the big lizard, he stood perfectly still and trembled with fear. then turned about and fled. One of the men now brought a very brave and even vicious rat-terrier, who entered boldly enough and walked, sniffing cautiously, towards the Gila Monster, which in its turn came forward to the length of the rope. The two animals were now only a few feet apart; the dog began to whine and bark alternately, advancing a few inches and retreating again, showing plainly that he would like to go in and shake his adversary, who by this time had straightened his legs and was spitting furiously, shooting out his forked black tongue, while his little black eyes exhibited the 'uncanny' fire of an angry snake. The dog could not be induced to go any nearer, and the fight was abandoned. The lizard was then given the corner of a woollen blanket; into this it bit furiously, holding on with such tenacity that we had to procure a crowbar to pry its jaws open.

Cats placed in the same room - which had no door - with the saurian would, upon perceiving the animal, bristle up like the 'fretful porcupine' and make a very speedy exit. I placed some chopped meat and a bowl of water within the reach of my captive, and left him to himself. On the following morning he was gone, having dexterously slipped the noose over his head - at least there was no visible sign of gnawing on any part of the rope.

Since then, I have experimented with many specimens; in fact, I buy a few every summer, either for that purpose or for stuffing. One I kept for over three months. It appeared to be quite old, and I used to place in its prison - a large dry-goods box - rats, mice, lizards, and birds with clipped wings. It remained entirely inoffensive; but the animals thus introduced into the box would at once retire into the farthest corner and remain there with evident signs of abject fear.

Finally, I resolved to stuff it, and now became acquainted with a new feature of this animal's nature, a feature so extraordinary, so altogether incredible, that I almost hesitate to relate it, although I can produce several eye-witnesses to the performance. In order to preserve the skin without the least mutilation, I thought that the best way to kill the animal with the least possible suffering would be to drown it. I therefore attached a heavy stone to the wire which held the animal fast around the shoulders, and immersed it in a barrel full of water, keeping the lizard completely under its surface, anchored as it were. But when I found, after twelve hours of continuous immersion, that the saurian was as alive as ever, I then, with the help of another man, tried to strangle the animal, but did not succeed. At this stage, a friend arrived at the house, and I related to him my perplexity; and he - a native of Sonora - killed the animal in a second by giving it a moderate short dry knock with the poker on the back part of the skull where the latter joins the backbone, telling me that the Gila Monster had a soft spot there, which I found to be the case while stuffing the animals.

In direct contrast with the last-mentioned peacefully inclined specimen were several which kept at different times. They would pounce upon anything that came in an aggressive manner near them; and I do not remember any small animal or bird that lived longer than from ten to thirty minutes after being bitten, with one exception. Small creatures, like mice and little pullets, would die almost immediately. A good-sized three-year-old rooster, however, which had a fight with him one day and was bitten in the leg, survived the battle for several years, although remaining lame. The lizard had one eye put out and was otherwise pretty badly used, so that I killed him in order to make a new experiment. I boiled him for about two hours in a well cleansed kerosene can, and then gave a street cur about one pint of the liquid substance. He lapped it eagerly, as if it were beef-tea, appeared to enjoy it greatly, and manifestly looked about for more. Although I kept him locked up for several days in my courtyard, I failed to discover in him the least inconvenience resulting from the unaccustomed diet. This experiment I repeated at different times, whenever I received a specimen whose mutilated carcass did not admit of stuffing, and always with the same harmless result; so that I came to the

conclusion that either the process of boiling or the gastric juice of the dog's stomach neutralised the venom.

But where is this deadly venom located? When I dissected the first *Heloderma*, I found, to my great surprise, that notwithstanding the evident outer resemblance of its head to that of the rattlesnake, there were no fangs, no venom-bladders, no visible receptacle for venom; and furthermore, that whereas the jaws of venomous snakes are simply held in position by a number of elastic skins, which allow their throats to stretch to a great extent, and thus enable them to swallow bodies of a much greater circumference than themselves, the jaws of the *Heloderma* are well locked or hinged like those of the quadrupeds.

Although I have always been careful not to come in direct contact with a live Gila Monster, I have never taken any particular precautions for my hands while stuffing one and have handled its flesh freely. The animal has two rows - upper and lower - of very sharp teeth on each side, those of the upper jaw being considerably longer than the lower. The stomach is very small. Strange to say, the skin is thinnest on the back, and along the spine is as thin as paper, while it becomes thicker towards the belly, and is thickest around the tail. The little paws are exquisitely shaped, and the forepaws resemble the thumb excepted - very much a human hand in form.

I have never yet seen a Gila Monster eat or drink, although had several that became tame enough. What little they did eat or drink was made away with either at night or when nobody was present. I generally gave them chopped meat or earthworms; but am positive that quite frequently, especially after being recently captured, they would go without food or drink for a week or more. Its natural food I suppose to consist of small insects, bugs, worms, and larvae; and as it has never been seen before April or after September, it is rational to conclude that it hibernates during the cool and cold seasons."

(John A. Spring, A mysterious and dreaded lizard, Chamber's Journal of Popular Literature, Science and Arts, London & Edinburgh 1890, p. 158-160)

Vergiftung / Poisoning



Heloderma suspectum 'suspectum' | © Harold van der Ploeg

Vergiftung / Poisoning

Übersicht / Overview

I. Giftwirkung / Toxic effects

1883 - A partial study of the poison of *Heloderma suspectum* - Sir John Weir Mitchell and Edward T. Reichert

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II. Vergiftungsberichte / Cases of poisoning

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I. Giftwirkung / Toxic effects

1883 - A partial study of the poison of *Heloderma suspectum* - Sir John Weir Mitchell and Edward T. Reichert

“For some years past it has been known to naturalists that the Gila lizard of Arizona and Sonora was endowed with anterior deciduous grooved teeth, which communicated by ducts with large glands within the angle of the lower jaw. These arrangements naturally suggested a certain power of poisoning, as to which, however, the most conflicting accounts have reached and continue to reach us from Arizona. In many houses the sluggish creature shown to you was a pet of children, and seems to have been averse to using his weapons of offense. The occasional accidents from his bite were variously explained away; but still, among the Indians and some settlers, he enjoyed an evil reputation. Only within a week we have had two letters from Arizona, the one describing him as “more peaceful and harmless than a young missionary,” and the other as being “worse than a whole apothecary shop.” Nevertheless, both in France, and of late in London, specimens have bitten and promptly killed small animals.

It is worth while to mention more distinctly some of the evidence for and against the poisoning power of *Heloderma*. His bad name in Mexico is mentioned by Bocourt and Dumeril, but Sumichrast is more full in his statements.

This curious lizard is, he says, slow and embarrassed in his movements, and hides in the daylight, and especially in dry weather, to emerge at night and in wet seasons. He is said to smell ill, in fact, to be of a nauseating odor, and is described as slobbering forth a sticky, whitish saliva when irritated. The natives, says Sumichrast, hold him in the utmost terror, and consider him as more fatal than any serpent. When made to bite a fowl, it died in twelve hours, with bloody fluid exuding from its mouth, the wound being of a purple tint. A cat bitten was very ill, but recovered, remaining thin and weak. The *Heloderma horridum* sent to London, to Sir John Lubbock, killed a frog in a few minutes, and a guinea-pig in three minutes.

Many years ago Dr. Irwin, U. S. A. (“*Amer. Naturalist*,” Nov., 1882), experimented in New Mexico with the Gila monster, and concluded it to be harmless, while Mr. Horan, Superintendent of the National Museum, says he himself has been several times bitten without serious results. The following statement of Dr. Shufeldt (*ibid.*) adds a further difficulty in making up our estimate of the powers of *Heloderma*. The lizard he speaks of is the one we now exhibit. It was sent to the Smithsonian Institution by A. T. Burr, U. S. A., and is the H.

suspectum of Cope.

On the 18th inst., in the company of Professor Gill, of the Smithsonian Institution, I examined for the first time Dr. Burr's specimen, then in a cage in the herpetological room. It was in capital health, and at first I handled it with great care, holding it in my left hand, examining special parts with my right. At the close of this examination I was about to return the fellow to his temporary quarters, when my left hand slipped slightly, and the now highly indignant and irritated *Heloderma* made a dart forward and seized my right thumb in his mouth, inflicting a severe lacerated wound, sinking the teeth in his upper maxilla to the very bone. He loosed his hold immediately, and I replaced him in his cage with far greater haste, perhaps, than I removed him from it.

By suction with my mouth, I drew not a little blood from the wound, but the bleeding soon ceased entirely, to be followed in a few moments by very severe shooting pains up my arm and down the corresponding side. The severity of these pains was so unexpected that, added to the nervous shock already experienced, no doubt, and a rapid swelling of the parts that now set in, caused me to become so faint as to fall, and Dr. Gill's study was reached with no little difficulty. The action of the skin was greatly increased, and the perspiration flowed profusely. A small quantity of whisky was administered. This is about a fair statement of the immediate symptoms; the same night the pain allowed of no rest, although the hand was kept in ice and laudanum ; but the swelling was confined to this member alone, not passing beyond the wrist. Next morning this was considerably reduced, and further reduction was assisted by the use of a lead-water wash. In a few days the wound healed kindly, and in all probability will leave no scar; all other symptoms subsided without treatment, beyond the wearing for forty-eight hours so much of a kid glove as covered the parts involved.

After the bite our specimen was dull and sluggish, simulating the torpidity of the venomous serpent after it has inflicted its deadly wound, but it soon resumed its usual action and appearance, crawling in rather an awkward manner about its cage.

The specimen shown has eaten once since we have had him, but the Gila monster is said to live on bird's eggs, and to eat daily of like food while in captivity. The sluggish habits ascribed to *Heloderma* in general have been noticed in our specimen; but it is clear, from Dr. Shufeldt's accident, that, like the habitually inert *Crotalidae*, this creature is capable of sudden, and, therefore, unexpected agility in attack.

As we shall have sent to us in the spring a number of *Helodermas*, we shall then be able to complete the study of the poison of these interesting lizards - the only members of the family of lizards as yet known to be poisonous. The subject is, however, too full of interest to delay the publication of our preliminary study, since, as far as it has gone, it is perfectly definite and satisfactory.

The Gila monster inhabits the dry hillsides of Arizona, and is said to reach the length of three feet.

The specimen we exhibit is about fourteen inches long, and, from war or accident, had, when he reached us, lost all but two of his teeth, and as yet no new ones have taken their places. Without them he would certainly be as harmless as a rattlesnake deprived of his fangs; and as these teeth are very small and easily removed, their absence may account for some of the instances in which the lizard has bitten and done no grave harm. Experiments made in the usual vague way, by allowing the lizard to bite animals, are obviously untrustworthy; so that it was thought best to use the saliva in known quantities. The fluid was obtained by provoking the animal to bite on a saucer edge - which it was most indisposed to do. When once it had seized the saucer it was hard to pull it away, so powerful was the grip of the lizard's jaws. After a moment, a thin fluid like saliva dripped in small quantities from the lower jaw. It was

slightly tinted with blood, due to the violence of the bite, and it had a faint and not unpleasant aromatic odor. The secretion thus collected from the mouth was distinctly alkaline, in contrast to serpent venoms, which are all alike acid.

Experiment I. - About four minims were diluted with one half cubic centimeter of water, and thrown into the breast muscles of a large, strong pigeon at 4.23 P.M. In three minutes the pigeon was rocking on its feet, and walking unsteadily. At the same time the respiration became rapid and short, and at the fifth minute feeble. At the sixth minute the bird fell in convulsions, with dilated pupils, and was dead before the end of the seventh minute.

The first contrast to the effects of venom was shown when the wound made by the hypodermic needle was examined. There was not the least trace of local action, such as is so characteristic of the bite of serpents, and especially of the Crotalidae. The muscles and nerves responded perfectly to weak induced currents, and to mechanical stimuli. The heart was arrested in the fullest diastole, and was full of firm black clots. The intestines looked congested. The spine was not examined.

Experiment III. - The following experiment was made on a full-grown rabbit in which the pneumogastric nerves were cut, and in which the same dose and method of injection were used ^[1], the object being to determine if the above nerves were in any way connected with the changes in the circulation observed in the preceding experiments. The animal died in convulsions with dilated pupils. The results were identical with those obtained when the pneumogastrics were entire, so that the effect on the heart is direct, and not by inhibition through the pneumogastrics.

[1] as in experiment II, here omitted.

The results of the autopsy in both of the above experiments are identical, and may be summed up as follows:

Autopsy, made immediately after Death. - Heart arrested in diastole; heart does not react to induction currents; muscles everywhere respond to electric stimulation; motor nerves in act; cord unirritable, and will not respond to the strongest current produced by one large gravity cell, with Du Bois-Reymond's induction coil; bowels still irritable; peristaltic movements occur spontaneously; the intestines are natural in color, as are all other organs. After five minutes the heart began to contract, and was finally found in a systolic condition. The interior of the organ was full of black clots, especially the auricles, the left ventricle containing but a very small clot.

We may conclude that -

The poison of *Heloderma* causes no local injury.

That it arrests the heart in diastole, and that the organ afterward contracts slowly - possibly in rapid rigor mortis.

That the cardiac muscle loses its irritability to stimuli at the time it ceases to beat.

That the other muscles and the nerves respond readily to irritants.

That the spinal cord has its power annihilated abruptly, and refuses to respond to the most powerful electrical currents.

This interesting and virulent heart poison contrasts strongly with the venoms of serpents, since they give rise to local haemorrhages, and cause death chiefly through failure of the respiration, and not by the heart, unless given in overwhelming doses. They lower muscle and nerve reactions, especially those of the respiratory apparatus, but do not, as a rule, cause extreme and abrupt loss of spinal power. Finally, they give rise to a wide range of secondary pathological appearances, which are absent from *Heloderma* poisoning.

There remains on our minds no doubt as to the fact that the fluid which drips from the mouth of *Heloderma* when it bites is a very active poison. The present study is, however, limited in

range, and we cannot yet feel sure that the fluid in question comes from the glands now presumed, from their relation to the teeth, to be poisonous.

The briefest examination of the lizard's anatomy makes clear why it has been with reason suspected to be poisonous, and why it poisons with so much difficulty. Unless the teeth are entire, the poison abundant, and the teeth buried in the bitten flesh so as to force it down into contact with the ducts where they open at the crown of the teeth, it is hard to see how even a drop of poison could be forced into the wounds. Yet it is certain that small animals may die from the bite, and this may be due to the extraordinary activity of the poison, and to the lizard's habit of tenaciously holding fast to what it bites, so as to allow time for a certain amount of absorption.

It is plain enough that a lizard as small as the one exhibited would be very unlikely to inflict a wound fatal to man; but it is possible that the larger animal - and it is said to reach a length of three feet - might prove a more efficient poisoner.

We are unwilling to drop the subject without a few words as to the nature of this poison. The recent researches of Dr. Sternberg and Professor Gautier have shown that human saliva may kill a rabbit in twenty-four hours, and a pigeon in a few hours, if a quantity of saliva has been concentrated by heat and so used. Professor Gautier thinks the saliva and all venoms owe, at least, a part of their power to normal ptomaines or animal alkaloids, the products of putrefactive processes, and recalls to us the fact that most secretions are measurably poisonous.

The answer to these views we shall have to consider elsewhere, and at length, but it will be sufficient here to say that there is no resemblance between the symptoms caused by the known ptomaines and those produced by any of the venoms. When it was shown that healthy human saliva was competent to kill, it was natural enough to leap to the conclusion that the venoms were merely concentrated salivas. The analogy ends with the fact that both may cause death, but the one may kill in twenty seconds, and the other requires, at the least, many hours, while also it seems, as regards saliva, to be, in some degree, a question of the toxic activity of certain individuals, not all being so uncomfortably endowed as Dr. Sternberg himself."

(Sir John Weir and Edward T. Reichert, A partial study of the poison of *Heloderma suspectum*, presented at the Meeting of the College of Physicians of Philadelphia, February 17, 1883, *The New York Journal of Medicine* vol. 37 (1883), p. 520-523) - [Abridged]

1890 - Letters from Charles D. Belden at Phoenix, Arizona

"The following interesting letters from Chas. D. Belden, M.D., were addressed to Messrs. Boericke & Tafel, and explain themselves. We omit only paragraphs not bearing on the subject:

First Letter.

"At about this season of the year we hear much of the injury done by poisonous reptiles. In this section are several species of considerable repute. One genus is much talked of and is an exceedingly repulsive animal. It is the 'Gila Monster' (Gila is pronounced Hee-la). It is known as the *Heloderma Horridus* and by other names. Prof. Sir John Lubbock has written of it, an article appearing in the *Scientific American*:

"This animal does not bite frequently, but when it does it is understood that the result is a numbing paralysis like to *paralysis agitans* or to *locomotor ataxia*. There is no tetanic phase - being, as I apprehend, a condition almost reverse in objective symptoms to Hydrocyanic Acid or Strychnia. These animals are about to open up for the hot season, in this similar to the rattlesnake, and a few have been captured lately. They are only found in this hot section of the desert in and near the Gila River, from which they take their name."

I write you to inquire if you will give me any directions or suggestions as to obtaining some of the poison and preserving it and for its use afterward. Any suggestions will be gladly received.

Yours truly,

CHAS. A. BELDEN.

Phoenix, Arizona, May 5, 1890.

Second Letter.

"I am not confident that I shall make a success of an attempt to extract the poison from this venomous reptile. It appears that others have hunted for a poison bag or pouch and have failed to find it. The method attempted has been to irritate the animal sufficiently to cause it to spout a liquid upon a glass or porcelain dish.

I am of the belief that you or your skilled agents can do this handling far better than I can, and the results will be far more satisfactory to the ordinary practitioner, such as I am. I have implicit confidence in your preparations, and prefer that I obtain this from the same source. You say you will gladly bear all expense in this matter. I can get a live animal and send it on by express or by freight. It will cost but a few dollars. I am afraid that the express company will refuse to carry it. If it must go by freight it may be a month on the trip. As it can live a long time on very little it may get through alive-but if not, then I will attempt to get the venom myself and send it on to you by express.

I send you a couple of papers, *The Tuscon Citizen* and *The San Francisco Chronicle*, with a short article upon this subject which may be of interest to you. It seems to me that it (the poison) differs in so many points from all present known venoms that it is worth our having. In the first place it is alkaline and all other poisons of reptiles are acid. Second, its effect is not always sudden but is lasting - causing sickness for months and death even after a year. Again, although it does produce paralysis it is not the tonic spasm, but rather the slow creeping death from the extremities. It does not seem to excite but to depress. For these few facts I am not to be hailed as a 'Discoverer' as you suggest. Please draw that part of it mildly. I am merely guiding attention toward what I have casually gleaned in a promiscuous way from the natives of this region. I will notify you when I ship the animal.

Yours very truly,

CHAS. D. BELDEN.

Phoenix, Arizona, May 21, 1890.

Third Letter.

"After addressing my last letter to you I carefully boxed a fine specimen of the Gila Monster, *Heloderma Horridum*, or 'suspectum,' first in a tin box well perforated, and then in an enclosing wooden box also well perforated. But, notwithstanding the carefulness in packing, neither the express company, the U. S. Mail, nor the railroad company would permit the package to be received at their offices. I therefore will trust to the chance of inducing some traveller to carry it in his trunk if I find any such obliging friend. Yesterday I had an opportunity to work over three of the 'monsters.' My plan of operations was to catch one by a slip noose, hold him, and attempt to catch some of his saliva, in the hope that it might be impregnated with the poison. The mouth of the animal is quite dry. I held a watch glass with nippers firmly in and between the jaws; the animal broke a few of the glasses. But upon the thicker ones I obtained a few drops of a pasty yellowish fluid. It quickly dried upon glass. I sprinkled sugar of milk upon it to absorb it, and with a clean steel I removed it from the glass into two small vials, one containing alcohol, 95°, the other sugar of milk. I am certain you have at least 2 drops of the animal's mouth fluid, gathered as it was attempting to bite, in each of the vials. It may be that the quantity is three drops, but as I could not obtain it in such quantity as to drop it I cannot be accurate. I tested three animals. I would kill and dissect one if I believed it the better plan.

Will you make any use of the enclosed or do you want me to go further and attempt more?

Yours very truly,

CHAS. D. BELDEN.

Phoenix, Arizona, May 29, 1890.

The following are the newspaper articles referred to in the letters:

The Gila Monster (*Heloderma suspectum*).

"In view of the accident which happened a few days ago to Hon. Walter L. Vail, through the bite of a Gila Monster, we publish to-day an extract of a paper written by our townsman, John A. Spring, and published in the April number of *Chambers' Journal* (London and Edinburgh), relative to the venomous nature of this mysterious lizard. Lack of space forbids us to reproduce the whole article.

'The long-debated question as to the venomous nature of the Gila Monster, which the scientists have named *Heloderma horridum*, was brought up at a late meeting of the College of Physicians at Philadelphia. Drs. Mitchell and Reichart had on hand live, vigorous specimens of the lizard. Dr. Mitchell caused one to attack the edge of a dish, and some of the saliva was caught in a watch-glass. This was first tested. The venom of poisonous reptiles is acid, but this was alkaline. A minute quantity was then injected into a live pigeon, which died in less than nine minutes. Other experiments were tried, which demonstrated the dangerous character of the poison. According to these learned doctors, a rattlesnake's poison is a mere bagatelle in comparison.'

A few years ago the following well-authenticated fact occurred in the Huachuca mountains. A woodcutter who had laid down in complete health to sleep, wrapped up in his blanket, failed to arise in the morning when his co-laborers called him. Upon uncovering him, they found him stone dead, and near his body a Gila Monster, which, in the bustle and confusion of the moment made good his escape. As the body of the man bore no marks of a bite or other wounds, we must suppose that his death was caused by the mere exhalation of the lizard.

Near Magdalena, Sonora, a man was hunting rabbits with a dog. The latter inserted his snout into a rabbit hole, but immediately retreated, uttering fearful howls, while he was trying to shake off a Gila Monster, which had fastened its teeth into the dog's nose, and, although snarling and spitting without interruption, could not be made to let go its hold till it was killed, and even then its jaws had to be forced apart with an iron rod. The dog very soon began to act strangely, and showed something like the same symptoms a horse does when suffering from 'blind staggers,' but soon began turning around itself around in a circle, and in about twenty minutes fell down dead. The same actions before death were observed in a mule, only this animal was bitten in a hind leg, and lived for several days.

A young miner while prospecting was bitten just above the shoe. Although previously in the best of health, he at once began to lose flesh, became melancholy, and died in a few months in the manner of those who succumb to what in Germany is called the galloping consumption.

Many similar cases might be enumerated but suffice it to say, that among the natives who have an abject fear of this lizard, the universal belief is that the spittle or saliva, and even the mere breath and exhalation of the animal in an excited state is deadly poison.

Where this deadly venom is really located, and by what process of nature it is produced, remains an open question. When I dissected the first *Heloderma*, I found, to my great surprise, that notwithstanding the evident outer resemblance to that of the rattlesnake, there were no fangs, no venom bladders, no visible receptacle for venom; and furthermore, that whereas the jaws of venomous snakes are simply held in position by a number of elastic skins, which allow their throats to stretch to a great extent, and thus enable them to swallow bodies of a

much greater circumference than themselves, the jaws of the Heloderma are well locked or hinged like those of the Mamalia, and contain two rows of very sharp teeth on each side, those of the upper jaw being considerably longer than the lower.

The vitality of the Gila Monster is something wonderful, aye, incredible; it will not die by drowning, nor by strangulation nor by laceration; still it has one soft spot, where a moderate, short knock with a hard substance will cause instant death. This spot is on the back part of the skull, where the latter joins the vertebrae. One should always be careful to ascertain positively the death of the animal before attempting to handle it, for its aptitude of feigning death is as great as its vitality."

JOHN A. SPRING.

Tucson, Arizona, Daily Citizen, May 75, 1890.

The Gila monster - The kind of lizard that bit W. L. Vail at Pantano

"Is he poisonous?" said a young man behind the newspaper stand at the Nadeau. 'Well, I should say he was. It isn't his breath, though. A man from Arizona said that the forked tongue was the sting.' 'You're wrong,' said a listener, 'its breath is what kills people. I heard a woman say that a single blast of its breath was sure death.'

'That may be,' said another, 'but I saw a man die from the bite of one, and that is the secret of it. I'd rather have a rattler bite me any day.'

'Where was it?' queried a startled listener.

'Over in Arizona,' was the reply. 'A friend of mine had one in a box just outside of a saloon, and one day a chap came along who was so drunk that he was ready to eat up the earth. He was afraid of nothing, and when he saw the box and the sign "Hands Off - Poisonous," he swore he could handle it, and before they could prevent him, he ripped off the slats and made a grab at it. The thing twisted around and bit him on the finger, and, to make a long story short, I saw him die in the middle of the street a short time after.'

The subject of all this conversation was a pale yellow-and black, blunt-headed lizard, about a foot in length, that rested upon a bed of sand in a small wooden box. It was the famous Gila Monster of Arizona, the only poisonous lizard in the world, and as ugly and disagreeable a looking creature as one could possibly imagine.

The head was long and blunt, the eyes black and bead-like, the tail half the length of the body, thick-set and club-like. The entire body seemed encased in a thinly coated armour, marked curiously with yellow and black.

The Gila Monster is sluggish and slow of movement, in this respect being entirely different from the tribe in general. In its own country the animal shows more activity, especially in the dry, hot regions contiguous to the Gila river. In confinement it has the habits of a young alligator more than anything else. The interest which centers in the Heloderma lies in the poison that is supposed to lurk in its bite, and perhaps no animal has given rise to so many weird and wholly imaginary stories.

The natives and some ignorant whites suppose that its breath is poisonous. Others think to have one touch the body is a bad sign. The Heloderma is simply a lizard and the only one known that can poison other animals by its bite; a discovery made a few years ago by some naturalists who were traveling through the country. The story was not at first believed, but several were sent East where the poisonous properties were soon demonstrated. A naturalist at the Smithsonian was bitten, the poison taking effect so quickly that he had barely time to call for help. Small animals soon died after being bitten, and it was shown that human beings, under certain conditions, might easily die from the effects of the bite.

The poison of the Heloderma has been carefully examined by Messrs. Mitchell and Reichert, the experts, who announce that the physiological action of the poison is entirely different from that of snakes. The latter destroys life by paralyzing the respiratory center, while the poison of the Heloderma at once attacks and affects the heart, paralyzing it.

Among the interesting experiments that of injecting the poison subcutaneously has been tried. There was no local effect, the heart being at once affected, slowly contracting, the spinal cord finally becoming paralyzed.

It is probable that the condition of the victim or his general health would have much to do with the question of death. If a man was in a poor condition and run down he would possibly die, while a healthy man would not be seriously troubled.

Specimens sent to Europe were experimented upon by Sir John Lubbock. A frog bitten by the lizard died in a few seconds in convulsions. A guinea pig bitten in the hind leg passed away in three minutes, and other animals died equally as quick, creating in the minds of the observers a decided respect. If the teeth of the specimen at the Nadeau House are examined they will be found to have curious fissures, and a further and closer look into the mouth of the monster will show at the base of the grooves small dents from which the poisonous saliva flows. The Heloderma is an interesting creature, and while not always sure death, it is well to keep it at a distance and handle it with the care and respect due its unsavoury reputation." - *Los Angeles Tribune*.

Fourth Letter.

"If it is questioned by any one whether the bite of this hideous lizard is poisonous I think it is fairly answered by the statement of the following occurrence:

A happy family of six Gila monsters had been kept in a showcase for a couple of months at a prominent store in this city. The animals had eaten heartily and had crawled around as circumstances required; still they slept most of the time and acted sluggishly. One day this case was removed out of doors and placed where the sun's rays poured sharply upon it. Within a short time these animals began to act queerly. They seemed excited and worked themselves in strange convulsive ways. Their tails, which hitherto depended as ornaments, now commenced to thrash, and the animals started upon a quick trot around the cage. As they touched one another they would snap. This was a new feature, as previously they had crawled over one another as over stones and the one trodden upon made no kind of remonstrance. Soon one monster caught another and bit its legs and feet. A free fight ensued, each one biting and snapping at anything within reach. Within a few hours from the time of the placing of the cage in the open sunlight all the monsters were dead. Upon careful examination there was no wound of any size to be found, such as should have caused death. There was no severe injury; no loss of blood or of any vital fluid whatever. If these animals had not died from poison it would be hard to guess what was the cause of their death, and there was no other poison in the cage than that which they contained. It is not remarkable that there was no abrasion of the skin, as it must be remembered that the teeth are small, short and fine pointed, about the size of a coarse sewing machine needle at its point, and the hide of the monster is as tough as that of the crocodile, but of smaller scales and also thinner.

The effect of the sun's rays will be seen to correspond to the well-known influence which the same agent has upon rattlesnakes and other venomous reptiles. A rattlesnake kept in a dark and cool place may be handled with comparative safety; but the same animal is extremely dangerous when he has been exposed to the sun's rays for a time.

Experiments have been made upon dogs in this section, and invariably when the monster has bitten a dog the victim is dead within a few hours. The symptoms generally given as follows: First, the dog breathes heavily, and, his head hanging down, his tongue protrudes more than

naturally. After a short time he is unable to stand upon his legs; his head is then extended, probably to more readily gain breath, as the throat becomes swollen inside. A shuddering or shaking of the muscles, in an irregular manner, takes place occasionally, and the animal dies without any marked spasms or convulsions.

Mr. Vail, of Tuscon, whose case was reported in THE RECORDER, has recovered from the bite he received about three months ago. The only perceptible result has been a swollen tongue, which seems unwilling to resume its former proportions. The treatment in his case was that so strongly recommended by European authority: profuse sweating by administration of Jaborandi. Mr. Vail says that his suffering was intense, the pain proceeding from the wounded part toward the head and back. Immediately after receiving the wound, which was upon his index finger, both the wrist and finger was tightly bandaged. Medical assistance was not procured for two hours. Then the wound was cleansed and dressed and the bandages reapplied. It was found that for three days those intense pains would shoot toward the head and spine upon giving any relief to the bandages.

It is generally understood that a victim who is pretty well "pickled" with bad rum will certainly die from the bite. Mr. Vail's case is a negative instance in favor of the theory. He was a man of temperate habits. An affirmative instance is that of a miner, living not far from here, who is supposed to have died a short time ago from the effects of a bite, after having laid in a lingering, death-like state for several months. He was bitten while drunk.

It appears that man does not die so quickly from the effects of this poison as other animals do, but that all cases well authenticated show a long, lingering, wasting sickness.

Yours, very truly,

CHAS. D. BELDEN, M.D.

Phoenix, Arizona, Sept. 8th, 1890.

(Gila Monster (*Heloderma horridus*), A suggested remedy for paralysis agitans and locomotor ataxia, The Homoeopathic Recorder vol. 5 (1890), p. 163-169, 258-259)

1893 - The conflicting evidence as to the poisonous nature of the Gila monster - W. B. Clarke

"The following is taken from a paper by W. B. Clarke, M.D., printed in the *Indiana News*:

"With regard to the poisonous nature of the Gila monster there is a mass of conflicting evidence as to his ability to kill men, but no doubt that his bite is quickly fatal to small animals. The doubt comes from the difficulty of obtaining reliable and ocular demonstration, because, of course, few men will get bitten. But Professor H. C. Yarrow, of the National Museum at Washington, has the written affidavits of two reputable persons that they had seen a man die from a Gila bite, and I have a California newspaper clipping to the same effect. The Smithsonian toxicological researches, before alluded to, authoritatively demonstrated the rapid and sure action of the poison, and that its action is different from that of the venom of snakes, the latter destroying life by paralyzing respiration, while the *Heloderma* poison paralyzes the heart. Nor has it any local effect when hypodermically injected, but goes to the heart just the same. Sir John Lubbock, that close observer of England, also experimented with specimens sent him, and came to the same conclusions, and that the spinal cord has its power annihilated abruptly, and the muscles will not respond to powerful electrical currents. While then, the bite of this interesting creature may not always mean sure death, it is well to handle it with all the evidences of distinguished consideration due its unsavoury reputation."

(*Heloderma horridus*, The Homoeopathic Recorder vol. 8 (1893), p. 263-264)

II. Vergiftungsberichte / Cases of poisoning

1893 - A man was bitten on the wrist

Florence, Arizona, June 22.

"Richard M. Farthingay, a tourist from Minneapolis, returned here last evening with the remains of Arthur James, who had accompanied him on the journey, and who had died the day before from the bite of a Gila monster.

The story as related by Mr. Farthingay, who seems to be utterly prostrated by the horror of the occurrence, is indeed a terrible one. It appears that following a blacktailed deer the two hunters found themselves near a small water course emptying itself into the Gila, and at last struck camp for the night on this creek. The weather proving rainy they sought shelter on a little cavern formed by a heap of rocks, taking the precaution to close its entrance with coals from their camp fire, for fear of rattlesnakes, but not observing the foe within.

Just at daylight, Mr. Farthingay was awakened by something that had just slidden over his prostrate body and fallen to the floor of the cavern. Opening his eyes he saw the reptile-like shape and snake head of one of these venomous creatures. It was travelling rapidly, and before Mr. Farthingay could reach his gun had encountered the sleeping form of Mr. James, whose breast it attempted to climb.

Disturbed by the touch of the animal, the unfortunate man, without opening his eyes, threw up one hand to dislodge whatever it was, and catching it by the tail would have thrown it from him, but the deadly teeth of the monster fixed immediately in his naked wrist, and though Mr. Farthingay hastened at once to his friend's relief and endeavored to pull it off, it held on like the grim death it was. Then, though fearing to strike the man instead of the reptile, he seized his gun and fired the contents into the creature's body. The monster let to its grip on Mr. James and made an effort to reach this new antagonist, but a second volley tore its head from its body.

Mr. Farthingay now turned his attention to his friend, and found that he had fainted. On being restored to consciousness Mr. James complained greatly of his wrist, which he said felt as if on fire, and which almost immediately began to swell. Immoderate thirst now set up and fever ensued, so becoming very much alarmed about his companion, Mr. Farthingay proposed setting off at once to town to procure medical attention for the wound, but Mr. James fearing to die alone, implored his friend not to leave him.

In answer to his prayer the other agreed to await the course of the trouble, and fetching water from the creek bathed the wounded arm, but in less than half an hour the entire member was swollen to nearly three times its natural size, and from some slight discoloration assumed a deep purplish hue, nearly black, in splotches about the larger blood vessels.

Delirium now set in, and while anxious to summon assistance Mr. Farthingay was forced to restrain the now raving, shrieking man, who again and again attempted to throttle his companion when the latter endeavored to keep him from running out of the cavern to the creek. At last, worried out, Mr. Farthingay was flung aside by the frantic sufferer, who broke out of his grasp and ran to the stream howling. The other followed as rapidly as possible, but only arrived in time to see Mr. James struggle down the shelving bank, then totter forward and fall.

When he reached him it was to find life entirely extinct, James lying with his head in the water and his own teeth fixed in the swollen, gangrened arm. After exhausting such restoratives as he had with him, Mr. Farthingay dragged the body back to the cavern, when he set off to seek assistance. A few miles further he came across an old Mexican who living near the river in an adobe hut was also the fortunate and opulent professor of a donkey and cart.

With these latter the two men returned to the cavern, when James' body was placed on the cart and driven to town. Before leaving the place, Mr. Farthingay made a thorough search of the cavern and discovering a female monster with six newly-born young ones, killed the entire lot. The mother, though shot nearly to pieces, made an assault on the hunter, but his heavy hunting boots prevented her from biting him. The old Mexican who accompanied Mr. Farthingay and his friend's rapidly decaying body to town declared that James was the fourth man who had been killed by these deadly creatures on the river this spring. There is no known antidote for their poison. - *Philadelphia Times*."

(A Gila monster's bite, Terrible fate of a tourist's companion in Arizona, *The Homoeopathic Recorder* vol. 8 (1893), p. 318-320)

1896 - A Yuma squaw was bitten 30 years ago

"The *New York Sun* publishes an article on the Gila monster from which we clip the following, as showing the effects of the venom:

'Among the Yuma Indians is a squaw who was bitten by one of these reptiles over thirty years ago. What decoction was given to the woman to save her life, or what the army physician at the United States garrison there did for the poor savage is not known, but she is pointed out by whites and Indians in the town of Yuma as the only person in that locality that ever survived the poison of the Gila monster. This woman's leg, which was bitten, has shrivelled away to half the size of the other leg, and the squaw has been a semi-idiot since her accident. For several years she claimed to be deaf from the effects of the reptile's venom.

Where the afflicted person survives an hour or two after the bite the agony is described as awful to witness. The venom of the rattlesnake is somewhat numbing in its effect, and after the first half hour is not so very painful, but the poison of the Gila monster goes through the human system with lightning rapidity, and causes unspeakable pain and excruciating agony from head to foot. The victim seems to be paralyzed, and yet every muscle, bone, sinew and particle of gray matter is keenly alive to intense pain. The sufferer's head seems as if it would split open. Very few persons bitten by a Gila monster can speak after the first fifteen minutes, but unconsciousness seldom comes until a few minutes before death. Physicians say that the poison sets up a tremendous action of the heart, and the victim really dies of heart failure.' "

(*Heloderma horridus*, *The Homoeopathic Recorder* vol. 11 (1896), p. 191)

Prüfungen / Provings



Heloderma suspectum

Prüfungen / Provings

Übersicht / Overview

1893 - Provings of Robert Boocock

1894 - A young man who laughed at the proving of Dr. Boocock took six doses of the sixth potency in a spirit of bravado

1898 - Symptom-Register - Hugh A. Cameron

1893 - Provings of Robert Boocock

"First. Accidental, or before I was fully ready to begin the proving:

Introduction. - Having seen in the HOMOEOPATHIC RECORDER a question as to who would prove *Heloderma horridus*, or the Gila monster, and having something to send to the RECORDER, I answered that I would. At that time I was debating in my mind what I should try to prove next, and here was something that was needed. Why not take this? and so I answered that I would, not knowing at the time what I had promised to do; but having given my word, I would not back out; although I felt, after reading up what I could find about this monster, that I had made a very rash promise. Boericke & Tafel sent me a vial of the 6x trituration. Of this I dissolved one drachm vial in four ounces of diluted alcohol, and, after succussing for half an hour, I medicated with this some No. 35 globules, and took three or four drops, or what wet my finger while I was succussing. I did this unthinkingly, for I was intending to begin with the week and make a note of my pulse rate and temperature, but was seized with such an internal coldness from my heart, as if I was being frozen to death internally, and I had no way of warming myself. Resisting the temptation to take something, because I believed that this was the direct result of the drops of *Heloderma horridus* I had licked from my fingers, I resolved to bear it as well as I possibly could. But, oh, the coldness from within outward! My mind was clear, and movements were good as usual; nothing but internal coldness, as if I was filled with a deathly coldness.

I wrote to Dr. T. F. Allen to ascertain if he knew of any antidote; he did not know of any, and I believe not any is known. After suffering for some time, until supper was ready, I ate some hot sour pickles, which warmed me some, and I think antidoted the poison. *Acetic acid* may be an antidote to this alkaline poison. At least, it is worth remembering. Oh, how powerful this new poison!

Dr. T. F. Allen said the dose was too strong, and that the 30th was low enough to prove. And now, what is this poison or creature from whence this poison is secured? It is a lizard, said to be the only reptile known whose poison is not acid but alkaline. Many have been poisoned by it, but no clear record has been kept as to how they died. The death is remarkably sudden, and, perhaps, because of this suddenness, it is said to be the result of paralysis of the heart.

I intend proving the 30th potency of this venom. My notes are to be jotted down as I am about my professional duties, and, as the feelings are noticed, I shall not try to classify them, but jot them down as they are forced upon my attention.

I think, however, to make my proving clear to anyone, all that is now known about this creature ought to be published in connection with this and other provings.

Notes on the Provings of the 30th Potency of *Heloderma Horridus*.

December 5th, 1892. I am in my sixtieth year, sanguine, bilious temperament, fair complexion and weigh 160 pounds, height, 5 feet 6 inches. My normal pulse rate is 72, full, round, and regular. Temperature, 98 2-5. I am in very good health. Good appetite, sleep well, dreamless, awake about 4 a. m. to urinate, and then sleep until 6 a. m., when I get up for the day. By this afternoon's mail received from Boericke & Tafel *Heloderma horridus* 30th. At once took one drop on my tongue, one hour and a half after lunch. Good feeling. I have a slightly ulcerated left nostril. Nostrils and ears are dry. A slight headache and some irritability of temper. My chore boy is very trying. My pulse is fairly good. Bowels move daily, but not very freely. I do not drink alcoholic beverages of any kind, neither do I smoke nor drink strong coffee, or tea, or cocoa. My usual and favorite beverage is hot water with a little milk and sugar in it. If much sugar or salt is used my stomach gets very sour, and waterbrash is the result. I therefore use very little of either, though I am very fond of sweetmeats. My urine is good in quantity and color. Water passed since lunch, specific gravity 1.020 per cent. Acid reaction. Slight traces of phosphates.

This a. m. had neuralgia of right cheek, from cold.

When I received the first bottle of *Heloderma horridus*, I took a one drachm vial and filled it with the 6x trit., and dissolved it in four ounces of diluted alcohol, of which I took a few drops; dried my fingers on my tongue, and a severe feeling of internal coldness, so intense as to cause me to fear being frozen to death, ensued. I had some twitches about my heart, as if the blood was hard to get in or out. I was somewhat alarmed, but as I had no trembling I sat over the register and tried to get warm. The day was a very cold one, but my office was comfortably warm, and I had no consciousness of having taken cold.

I was not surprised at feeling this so soon after taking the few drops, for I know that I am very sensitive to any medicine, and have a bad habit of tasting medicine, but never without being conscious of its effects, sometimes very unpleasantly so.

Now, to-day is warm and damp, thunderstorm this morning, although it is December 9th. The storm lasted three or more hours; lightning very vivid. I had already taken one drop of the 30th, with a severe nervous headache, but I forgot that when I took the medicine. I have medicated 2 oz. No. 35 globules with 30th dilution, and have taken six globules as a dose before they were dry.

A feeling of heat in head and face, some headache over the right eyebrow. Cold feeling in my legs; after two hours a numb feeling around and down my left thigh; feeling very drowsy, so took a short nap in my chair. Was awakened suddenly with a jerking in my head. Central part of frontal bone so queer as to awaken me.

When my office bell rang it threw me into a startled and trembling condition, something new to me. At 5:30 took four globules more.

8 p. m. The pressure at my heart and in my head and scalp, is very great. A feeling of great heat and some pressure. Not so much burning in my face, but a feeling on my left cheek as if being pricked with points of ice. A very severe and tired feeling, with coldness of legs and feet. A slight dryness of my lips, with a tingling feeling and great dryness in my throat. Gurgling in the region of the spleen.

9:30 p. m. The pressure and heat on the top of my head appears like an inflammation of the meninges. It does not affect my mind; that remains clear, and I can think and read as well and as long as ever. No more medicine.

Last night whilst retiring had some sharp, shooting pains in my bowels, more on the left side of abdomen, and sharp twinging in left testicle. During the night had some erection of penis, but felt too tired to take advantage. A feeling of great prostration. In my dream this feeling of

weakness was uppermost; I was, in my dream, delivering a temperance lecture, and would have made this weakness an excuse, but remembered that I never make excuses when in any way I am able to go; so delivered my lecture, but had this strange feeling as if I was asleep, or was perfectly unconscious of what I was saying, and only became conscious when I had finished, at the applause. I had been speaking one hour by the clock, which I could distinctly see pointed to half-past nine. This feeling was just as if I had awakened from sleep, and yet it was all in my dream.

Morning. My head is better on the top; that burning feeling is gone, but have a soreness and a stiffness in the occiput, extending down my neck; great weakness and giddiness if I move very quickly; otherwise mentally clear and bright, but not inclined to talk. Bowels moved more freely than usual this a. m. Before 7 a. m. a slight numb feeling down my right leg. My feet are more sensitive to the cold than is usually the case with me, and as it is a very warm, bright morning cannot otherwise account for this coldness of my feet than as a part of the effect of the drug. My throat and tongue are very dry (I am a mouth breather), but they are painfully dry, very much more so than usual. Have a stinging sore feeling in my right tonsil. Urine was not passed as freely as common.

No medicine taken to-day. My head has felt sore all the day, with aching at the base of the brain; very weak; no desire nor inclination for exertion in any way. Heart has a good deal of sticking pain, shooting through towards the right side from the left. Stitches in my abdomen, followed by a loose, copious stool, lumpy, of good color. Urine scanty. Trembling a good deal in my left side, hands very shaky. The ringing of my office-bell would startle me into a trembling. Am very weak, very nervous. No headache, but a sore feeling. Mind clear. Calm feeling. A desire to be quiet. Copulation long and very enjoyable. A large flow of semen.

No medicine to-day. Head still feels sore; great itching of the eye-lids, and much flow of water. Sore mouth, tongue very tender; numb feeling along the left side, and down left side of my body; feet very cold; the coldness caused me to tremble very much.

Very restless night. No dreams. Bowels more free. Urine better, flow large quantity, often very clear; no smell. Specific gravity, 1.010.

Pain in head and soreness relieved by a copious flow of wax from both ears, but more from the left.

Pain over the heart; left nipple changing to right nipple.

Pain in bowels. Second free soft movement 1 1 a. m.

Soreness of the month, and sore stiff feeling at the parotid gland; stiffness of jaw; transient not weak to-day. More cheerful.

No medicine to-day. Not so restless last night, but was wakeful. Awoke some time towards morning with a feeling as if something had exploded in my right lung; the pain caused by it was deep in towards my left scapula. It kept me awake some time wondering what it could have been, but it passed away.

Severe headache; soreness; a desire to be quiet; don't want to talk.

Bowels moved easily: appetite good; feet and legs still very cold. It is a new thing for me to go to bed with feet like lumps of ice. Mouth and throat better.

This morning while sitting in church had a very sharp, stitchlike pain in my right kidney and great drawing in my left hand, as if it were being drawn together puckered up or with pain, followed by tingling and prickling in the fingers similar to what we feel when we say our feet have gone to sleep. Anaesthesia, then this tingling feeling ran up my left arm with some jerking, and caused a twitching or jerking in my head as if it were being drawn round to my left side; this was only transient. The feeling on the top of my head is such as I have experienced by being burned by the sun's heat. I have a good deal of tingling about my heart.

It seems to me somewhat strange that so small a dose, about 30 globules of No. 35 or less, should have set up such a series of strange, and, to me, new feelings; yet there is nothing else I can think of that might cause them. My eating and drinking is of the simplest kind.

Some giddiness several times to-day. Not much inclined for work. Soreness of head continues with tingling, and in hands, and around, my heart. Awoke in the night with a very hard pain in my bowels, left hypogastric region. Very severe while it lasted. Very severe headache; all around like a tight band or compress.

The soreness on the top of the head is not so severe, but the pain in the head is greatest in frontal and occipital bones; considerable giddiness; pain in my back, lame feeling, and across the pubes bone, extending down into the left testicle.

Sleep better. Dreamed about the Gila monster. Tingling in palm of my left hand and along my fingers. I feel cold, but not so much so, but shrink from exposure to the weather and am more inclined to sit over the register; this is very unusual with me.

Headache very severe all the day this a. m. While driving my round it was almost unbearable, and has continued bad all the day, and yet it has not affected my mind. Tingling down my arms and hands to the finger tips. Stitching pains through my bowels. Urine not so free; muddy looking. My eyesight has improved; before commencing this proving, when I looked at the stars or distant lights, there always appeared a small cluster of lights below, to the right of the main one. Now this has disappeared, and last night I could see the stars and lamps distinctly without any appendages to them. Some had a tail to the star, like a comet, only it was always on the upper left side, but this I do not see now. Astigmatism gone.

No medicine to-day. Some twinges in my left leg and left hand. Pain in my head; only on the left side. Later in the day the pain began in my right ear, extending round the back to the left. In the night dreamed of urinating in the bed, but did not. Awoke and emptied the bladder; a large quantity, very clear and bright.

No medicine to day. I had a good night's sleep; had another dream that I was urinating in the bed, which awoke me about 3:30 a. m. Again passed a large quantity of clear, pale urine. Bowels rather torpid.

Tingling, numb feeling down to my finger tips; otherwise well. Head free from pain and giddiness.

December 24th, 1892. Have not taken any more medicine, but have been watching what I fully believe are the effects of my first doses. The trembling along my nerves, in limbs, mainly in the thighs and arms, when in bed, will often come on strong enough to awake me out of sleep. Sometimes when quietly reading a trembling will take me and shake my body so as to prevent reading, and sometimes when writing, but it is only for a few seconds at a time and only at infrequent intervals. My mind remains clear. Appetite good, sleep well, and have nothing to worry myself about.

December 29, 1892. No medicine. Some trembling, but not so great or so extensive; it does not now extend along the whole limb. Parts of right arm and left thigh hemiplegial; no acute feeling. But some muscles will twitch and tremble for a few seconds. Just enough to arrest my attention and amuse me, and I feel like saying, "Hello, *Heloderma horridum!* have you not done with me yet?" For it is a great surprise to me how these feelings will come on and creep over me. And I am inclined to ask myself, can it be that all these strange and to me new feelings can be the effects following the taking of these few doses? And yet, if it were necessary, I could swear they were. I have my fears if I will ever be free from these nervous trembling spells, and the feeling in my head and heart.

[Dr. Boocock's second proving will appear in the April number of the RECORDER. It was a remarkable experience, the prover seeming to have been very near that greatest of mysteries, death. - RECORDER.]

Dr. Boocock's second proving

January 1, 1893. Having made two previous partial provings of the poison of this creature, during the months of November and December, 1892, I now purpose to make a more careful one, and if possible, by my efforts to learn by experience, all that is possible. I am conscious of many defects in recording the two previous provings; we have to learn to do some things by doing them. I now see that I ought to have given more attention to my pulse rate and my temperature, while it is very likely to be true that I have not yet got to the end of the effects. Yet having forgotten my resolve not to take any medicine, I tasted some *Ver. vir.*, and so stopped recording. And now with the new year, I shall try to get through with this proving before the New York State Society meeting. I hope to forget all that I have written of my feelings during my previous efforts to get at the spirit of this poison.

January 3, 1893. This 7 a. m. took 8 globules of No. 35 pellets, medicated with *Heloderma hor.* 30th. A very bright, clear morning, and feeling very well. After a good night's rest, had nothing in my consciousness to report about myself.

My pulse rate, one hour and thirty minutes after breakfast, was 72, full and round. This is three and one half hours after taking my first dose of 8 globules No. 35 *Heloderma hor.* 30th. My temperature after holding the thermometer under my tongue for five minutes is 98°, very slow in coming up from 97. It stood a long time at 97 35, so that I had to wait for it to rise to 98°; but we should remember that this is three and one-half hours since taking the medicine, and while feeling some of the effects of this first dose.

My head feels full, and a conscious feeling of aching similar to what one feels at the beginning of an influenza. Some cold feeling in biceps muscle of right arm. Chilly feeling in various parts of my body.

11 a. m. Took another dose of six globules before the effects of the first dose had fully developed itself.

I have a feeling of great weakness and giddiness, and a difficulty in remembering even the spelling of some simple words while writing.

12 meridian. Sensation as if a cold, freezing wind were blowing upon me from the bend of my knees. Head feeling as if the scalp were being drawn tight over my skull, and my facial muscles were being drawn very tight over the bones. A giddiness and a cold pressure from within the skull. A cold, running chill from superior maxillary down to the chin. Trembling of limbs. Coldness extending from the knee into the calf of the leg. Pain and pressure within the skull from crown to occiput, and from back forward over the left eye. A very drowsy feeling. I could sleep if I gave way to the feeling.

4 p. m. The feelings above described have returned twice since noon in four hours. My head feeling the same. Took another dose of six globules, 30th. While reading, a very sharp pain shot through my head from the left side over my eye to deep in towards the occiput. Experienced sharp, digging pain in the left side; very acute while it lasted. The cold feeling continues very constantly in my feet, with these arctic rays changing about. Mind clear.

10 p. m. On retiring, took another dose of six globules. Was awakened several times by an intense pain in lumbar muscles, and stitches in my intestines as if they were filled with pins, still sleep was very heavy; was awakened once by what appeared to be a bell ringing in my ear, so real that I thought it was a telephone call and got up; but lo! it was only a dream.

January 4, 1893, 7:45 a. m. Took another dose of six globules. Pulse, 72. Temperature, 97 3-5. A flush of heat in my face. A feeling as if I were walking on sponge or as if my feet were swollen. Dull headache. The arctic cold feeling is more in my right arm, elbow joint, and right thigh and left foot. A great trembling of my arm. It is hard work to steady my hand, which

holds my book, enough to continue reading or writing.

The feeling of swelling in my feet or walking on sponges sensation continues; a springiness, with a sense of looseness in stepping out, which requires some caution, as if I were not sure of my steps. The trembling of my hands is on the increase; feeling of soreness in my heart, more under left nipple; pain in my back, lumbar region. Some little scalding of urine; flow not so free and full, intermitting slightly, as if I had some calculus in the bladder which interfered with continuous flow. Stool more free and full.

Earwax, which had been very dry, now flows from both ears, but is more free on the left side. Left nostril sore; ulcerated. Throat sore and tender to outside touch.

4 p. m. Took another dose of six globules. Much trembling and coldness (arctic cold); cold places in various parts of my body, and a very hard pressure behind my left ear; pressure in ear from within outward; dry, itching scurfs in my nostrils, the left one worst. Headache all the time, with very sore spots in various parts of my head.

6 p. m. Back of head sore. Neck very stiff. Coldness outside of left leg and inside of right arm. A boring, sharp pain on tibia of the right leg, with twitchings of arm and leg. Giddiness. Very drowsy, but not able to sleep. Very much trembling and weakness when starting to walk after resting in a sitting position.

9 p. m. Very weak feeling, with pain in my heart; same place, under left nipple. Head aches and arctic rays in various parts of my body.

Took six more globules, and retired for the night. Slept very soundly until towards morning, when I was awakened by very intense pain in my back and lumbar muscles, and my left ankle felt as if a tight band were round it, trying to cut my foot off; very cold, arctic feeling in my feet. My head was very painful, as if I had a large cover over it, drawn very tight. The upper part of my neck near the atlas was very painful. Bowels feel full, but not so painful. A feeling as if my waistband were too tight.

January 5, 1893. Warm morning with some snow coming down. Pulse 72. Temperature under my tongue 97 3-5. Took twelve globules, a double dose. Intense pain in back of my head near where atlas is, to the root of my ears on both sides. Had a very severe attack of sneezing, and a severe chill ran down my back from base of brain to buttock, very like an ague. Several times have had cold rings round my body, from beginning between my shoulder blades and radiating round my body. Cold limbs, which could not be made warm over a hot register; my feet feel like lumps of ice, and there is a tingling sensation such as I have felt when recovering from being frozen. The head pains produce a giddiness, with inclination to fall backward, and a benumbed feeling prevails all over my head. Mind keeps clear. Pain in left thigh and calf of leg - a feeling as of recovering from bad bruises. The trembling in my hands is not so bad today; and though I feel the pain in my left heart it is not so bad.

9:30. Bowels moved, loosely; mushy; no pain; good deal of flatus.

12 noon. Took twelve more globules. Numb feeling in my head. A feeling as if I would fall on my right side. A good drive this morning in the snowstorm; and felt a desire to bear to the right side and could not walk straight because of this, and had repeatedly to stop or step to the left to get a straight course on the causeway. A good deal of the same feeling, but very weak and sleepy; was compelled to lie down, but did not sleep, although feeling very drowsy; laid very quiet, as if I was in a stupor; the old feeling in various parts of my body, only more acute; a feeling in various parts as if a needle were being thrust into my flesh.

4:45 p. m. Took thirteen globules. A very stiff neck the most prominent feeling. All the previously recorded feelings, only more intensely. I have a painful boring feeling in the middle third of left thigh.

8:30. Flushed, hot feeling in my head and face, but no increase in color; but then I have just come out of the storm.

9:30. Took twelve globules more and retired to rest; very tired; slept very soundly until 1 a.m., then could not sleep. My back, in the lumbar muscles, ached so and my left leg that I could not sleep for hours, and my brain felt as if scalded; an intense burning feeling in the meninges, for this did not affect my power to think. This hot feeling commenced and spread down my back. An intense pain over left eyebrow, through my left eye to base of brain and down my back. The pain in the back of my head caused me to bore my head deep into my pillow, and reminded me of cases I have seen of cerebro-spinal meningitis. An intense weakness, as if I had no power to move, and no wish to do so, and yet I was afraid I could not attend to my business. Yet, strange to say, I was not alarmed, but passively indifferent. I could not open my eyes without great effort; it was hard work to keep them open and the easiest thing for them to close, as if there were a great weight upon them, keeping them down. I begged to be allowed to remain in bed until some one wanted me professionally, and yet I could not thus give way to my feelings, and so got up.

7 a. m. Feeling very weak and giddy. Staggering about my bedroom trying to dress. It was all that I could do to lift a hod of coal to the stove. The pains in my head and lumbar muscles, back of my head near atlas and middle third of left thigh and right elbow are the most noticeable from the great pains; and arctic coldness in my feet and hands and arms; have had a transient feeling of pain in the little finger and little toe of right side. Very feverish or parched in the night, and my breathing was hard and sounded as if I was drawing my breath through iron pipes. I feel that I must not take any more medicine at present. When I remember what a long time I was in getting to the end of the previous symptom, I feel that I dare not go any further.

The dose I have been taking, a No. 35 globule, is as large as ten such as is ordinarily used for the 30th or for high dilutions, so that I have taken as good as sixty high dilution globules as a dose, and lately as high as one hundred and twenty-four and sometimes oftener daily.

I was surprised at these hot flashes and burnings in my head and along my spine. And these strongly reminded me of some feeling a proving of *Gelsemium* caused, only that has sweat, whilst this has no moisture, everything being dried up. Saliva, tears, nostrils, and earwax; the great weakness and pain in body reminds me of cerebro-spinal meningitis.

My pulse rate is 68. 8.15. Temperature, 97 only.

1 p. m. What fearful aching in my body! Arctic feeling throughout my body, except my head and face, and oh! so tired. A feeling as if it were almost impossible to keep my eyes open. While out on my professional rounds, a feeling came over me as if it would be far easier to lie down in the snowy streets than to keep trying to get along. The trembling is very persistent.

9 p. m. Oh! this bad feeling in my head, the aching, aching in my bones, in every part of my body, head to feet; no part entirely free from pain, my body so cold; a feeling as if I had holes in my garments, and cold, frosty winds were blowing through and freezing my flesh; cold penis and testicles, no feeling but coldness. A slight gluey discharge; a fluent discharge from nose, with great sneezing.

January 7, 1893. Last night slept very well until 3 a. m., then was awakened by a severe pain in my head and back, and both of my lower limbs; the pain in the top of my head was very severe, and although the hot feeling along my head from front to the back, and round the back of head from ear to ear, was not so intense, it felt more like pressure from fulness, and this was also true of all the other pains. The pains in the lower limbs kept me awake; moving them about, these pains reminded me of what used to be called when a lad, "growing pains." Tongue dry and throat parched, but not sore; eyelids very heavy and glued together; sensation of coldness, kept up but was not so very severe. Heart pains were bearable. I feel it as

something not to be trifled with. Not so much trembling in my hands this morning.

9 p. m. During this day, the most prominent feeling has been the intense aching in the bones of my neck. I could move my head and arms freely, but the intense aching continues; very weak and nervous with some trembling; my arms very weak from the shoulder down to the hands, and if I held anything long, my hands would pain. This afternoon the gleet feeling and discharge in penis returned, with very acute pain in left, testicle and some enlargement, (an orchitis symptom). Very thirsty. Some return of the burning in my head; a slight pain, in my back and lower limbs; not so much cold feeling in my body, only my feet are like ice balls.

January 8th. No medicine. The pain in my back and shoulders, was very distressing, and full, hot feeling in my head, eyelids very heavy, pains and sensation of stiffness through all my limbs. Some giddiness, very heavy sleep and heaviness of eyelids. My appetite is good, bowels regular, urine scanty. No sweats.

3 a. m. Feet very hot; heat through my body soon passing off, followed by arctic coldness but no chills, and these sensations followed alternately for some time.

2:30 p. m. Pulse rate, 72, full and round, jerky. Temperature, 97 2-5; feeling very sick, with intense pain in my back, lower lumbar region, and throbbing in my bowels; this throbbing can be felt all over my body, but this throbbing in my bowels is a new feeling; very intense pain and throbbing in the top of my head, cervical vertebra, and dorsal and lumbar muscles. No gleet discharge, but a feeling as if there were something running down; tenderness in the urethra; testicle pain has not yet returned, but cold, arctic rays are felt in generative organs, and these cold feelings return at infrequent intervals, with flushes of heat in my face, an occasional cold crawling feeling down my right cheek from my temple. The intense pain is going down my back very slowly; so stiff, full feeling in my buttock as if I could not move, but when I do move I am surprised at the easy way I can do it; there is a sensation of giddiness and a feeling as if I was leaning over towards my right side, but it is not really so. I am very stretchy and gapy. (Reminding me of a case of hysteric clavicus). This stretching relieves the pains in the lumbar muscles and limbs, but the pains then return in the calves of the legs, first after these spells of stretching. Some pains in the fingers of right hand, first hot then cold, even when feeling comfortable in other parts of my body. Urine, specific gravity 1010: little or no change; color of a greenish yellow, sometimes muddy, very seldom thick, like milk, after standing a short time.

10 p. m. This last four hours I have had a very severe aching in my right kidney; it was very hard to bear and resist the urging to take something to relieve me. A very sharp stitch through my right nipple to the inside of my right arm. Then from my left arm into my heart, which alarmed me very much. These stitch pains are all from left to right. No change in any of the other recorded symptoms.

January 9th, 8 a. m. Pulse rate 68; is not so full or jerky, but it is some. Temperature under the tip of the tongue, 96; deeper in, 97. This morning awoke at 3 a. m. and got up to urinate, but I could not stand without I had hold of something. Oh, such a weak, giddy feeling! I never fainted but once, from loss of blood, and these sensations are similar. Plenty of strength to hold me up, but unable to balance myself, and when I put forth an effort I staggered about like a man trying to walk with paralysis or locomotor ataxy. This idea was the most prominent in my mind, but I have a patient recovering from paralysis who has to swing his body as he walks, to get his feet forward, and is very weak and shaky about his knees, and these sensations very strongly reminded me of his efforts. His weakness is in his knees, but mine was from the base of my skull - cerebrum - where the pains have been so persistent near the atlas, extending downward. When I arose, at 7 a. m., it was very hard work for me to balance myself enough to complete dressing myself, and very hard work to carry my head. If I bent forward, then it required great effort to keep from falling on my face or backward. This lack of

balancing power was accompanied by a sensation of nausea, as if I were going to vomit. I persisted in my efforts to work, in hopes of shaking off these very alarming sensations, and by effort got through my morning work. Whilst shaving, a severe jerk of my right arm caused me to gash my face; very strange, but I ought not to have tried to do this. I have now some numbness in my right hand and arm, and a good deal of trembling. Arctic feeling in my feet and in various parts of my body. This feeling of want of balancing power does not entirely leave me; a full, pressing feeling in all parts of my head. And when I walk I notice I lift my feet higher than usual, or than is necessary, and I put my heel down hard, as if I was not sure of holding on to the ground. I notice some twitching, as if my feet would spring up, making me walk as if I had the cock's gait, as it is described. The pain in my kidney is not so severe now, but I feel it bad in the night, the pain extending across my lumbar muscles; and I have a soreness in the great muscles of my thighs when sitting, and itching tenderness through the whole surface of my body.

12 noon. Have attended my patients. Felt very weak, stiff and sore; scarcely able to go up two flights of stairs. I am very giddy, but somewhat better than when I first got up. Head feels very sore and bruised. Sight not so strong. Have been very much alarmed at myself, and feel sure that if this class or series of pains reaches my heart it will finish me. Am thankful I can yet record my feelings so far, and yet I am very sure that the poison of this monster has not fully run its course in me. As the first proving, it lasted at least three weeks. I do not now believe that I had gotten to the end of the first series of symptoms before I began the second, or what I now call this third proving.

10 p. m. Feeling very weak and depressed; very much discouraged; thoroughly blue. I slept this afternoon and awoke with the first chill, and cold waves coming over me, wave after wave, from my arctic cold feet upward. Back pains me very much. Kidney pain better, but my bladder is very irritable, as to be unable to retain any urine long, and have experienced urgings to pass it, but only now small quantities, though it will aggregate about four pints; acid reaction; specific gravity 1008. My head has not been so giddy, but have felt as if it were full from cerebral upward, spreading to both ears; and hot pressure on the top; and from over the left eyebrow inward throbbing or fluttering.

7 a. m., January 10, 1893. Thank God I begin this day with more comfort and more control of myself; my limbs are easier to manage; a little giddiness and staggering, and a stiff, bruised sensation in my back and lower limbs. My cervical vertebra is less sore and have little pain; and altogether feel very much better. My pulse rate is 80 this a. m.; full and round; no jerks perceptible. Temperature 98 under the tongue, by the root. Mercury very slow in rising; had to keep the thermometer in a long time. I have a flushed, hot feeling in my face and head; no trembling, less staggering, and can manage my limbs fairly well. I feel as I dared not trifle with myself any further, for I am very weak. A very little exertion would make me feel very ill. I am feeling like a man who had just come from under a deadly risk; am very weak and prostrated, with every nerve on the jump. Oh, so very weak! A sinking feeling. A parched thirstiness in my throat and mouth. My tongue is clean; bowels regular; a good deal of flatus, very fetid; pale yellow, greenish urine (specific gravity 1008), smelling very fetid: same smell as the flatus; more like the smell of rotting sweet fruit or vegetables.

6 p. m. Head aches all over; full feeling and pressure with giddiness; very weak, and no courage to face the storm; arctic feeling in my testicles and penis, at the end like a piece of ice; so cold to my hand; passing large quantities of water; (drank less), pale looking, specific gravity 1000. Lips dry and sticky, and nostrils dry and itching scurfs; my ears dry and scurfy; sharp stitches in my heart during this afternoon and evening; my head was very bad. It was very hard to say in which part the pains were the worst; the back of my neck, stiff and painful; and yet I could move my head any way freely, without increasing the pain, and so it has been with other parts of my body. I can read and think, when my head is feeling at its worst, and can

move when compelled to; when the pain is the most severe, and the stiffness and tottering seems the most intense; irregular or uneven stopping, even the trembling can be controlled at times when my will is exerted.

January 11. Pulse rate is at my normal, 72. Temperature 96 2-5; deep in under the root of my tongue, it is the same. My head is feeling very bad and very giddy; staggering gait. This appears to be caused by the painful feeling at the base of the brain; very weak and disinclined to exertion; much more sensitive to the coldness of winter; I feel very cowardly shrinking from exposure to the weather more than usual; and yet I cannot let this cowardly feeling interfere with my professional duties, and I am glad of this form of diversion, and find much pleasure in their performance.

9:30 p. m. Looking back at my day, it has been one of great weakness, free from pain, more than any day since beginning this medicine. Painful twitches in my right elbow joint and pain in my right breast; stitches in my heart from left to right; coldness very great in my feet, and cold waves down my back nearly all the day. Passed large quantity of urine, which, upon standing some time, becomes very thick, of a dirty yellow color, not so bad smelling. Not so much coldness in the generative organs; no swelling in my testicles; much stiffness about my buttocks and legs, but no such feeling when in motion. Trembling in my hands very much. Cold, chilly crawling down my right cheek. A good deal of acid on my stomach, bowels moved daily; very flatulent, loud discharge; appetite good; mind clear.

Prepared a paper for publication, two hours steady writing, which the trembling in my hands did not interfere with, and is only seen in the long strokes, or when holding my book in reading. Now my head begins to trouble me in the *Heloderma horridus* places and compels me to rest.

January 12, 1893. Free this a. m. from head and lumbar pains. Cold, arctic sensations in various parts of the body. A very sharp stitch through anus, to left testicle, down the penis. Urine very muddy and stool black in color, soft, mushy, more free. To-day is the freest from pain of any day yet. Pulse rate normal.

January 13, 1893. Very tottering while I was dressing; pain in limbs, thighs, and arms. Bicep muscles very cold feeling all the time.

7:30. Temperature, 97. Pulse rate, 60. Very cold feeling. Shrinking very much from facing the cold outside wintry storms, very unusual with me, it formerly being my happiest time of the year. Tongue clean, appetite very good, bowels moved daily; a blackish-green color. Pains come on in infrequent intervals in my heart, and a pain in my right breast under the nipple, similar in character as those I feel in my left heart region. Left to right direction. Stinging pain in right elbow joint. The backache does not disturb me very much; I feel it, and the head pains are also very light. My greatest suffering is from the cold, arctic rays in my body and the icy feeling in my extremities.

1:30 p. m. Have been my rounds but was scarcely able, very staggy, trembling, sudden noises startle me very much; very irritable, easily provoked. My patients are all doing well, no worry about them. Almost impossible to get warm. Headache and dizziness and very sleepy; cannot keep my eyes open. Must give up and have some rest. After dinner, pulse, 68. Temperature, 98 3-5. The first sense of warmth to day; hot soup, and my food was hot. Oh, this throbbing pain in my head! will it ever let up? My hands tremble very much, and jerking in and down my left limb. I am tired of it. I wish I could stop it, and yet I do not wish to lose the record or end, for which I am trying to bear this. Coldness is very persistent all the day, with only a short warm spell from hot food. Chill and sneezing which relieved my head for a short time. Retired at 9:30 very ill with a return of all the previously recorded symptoms.

January 14, 1893. Could not get out of bed at my usual time; very severe pain in head and

back of neck, going down my back and right leg; twitches, with cold, stinging, ice-needle pricks. My right hand is feeling as if it were frozen. Pulse rate 64; full, round, but appears to have a pendulum motion or twitch. Temperature 96 3-5. Mind clear, but very weak in my body, and I cannot get warm over a hot register or with hot fluids. This constant arctic cold is very hard to bear and makes me this morning feel as if I had a cake of ice on my back. My hands are blue with cold and my feet feel like lumps of ice. Headache and giddiness; could not keep from trembling while some patients were in my consulting room, and had a good deal of difficulty in steadying and controlling my voice; when excited could not get hold of the right words I wanted and dropped some when speaking, from a want of flexibility or a catch in my tongue. Pains in various parts of my body; the same locations and character. Quite a rush of business to day and very ill-fitted to attend to it. My hands and feet blue and aching with cold, even while I was sitting over a hot register that scorched my boot leather, yet no feeling of warmth in hands or feet. A good deal of throbbing and aching in the upper part of my kidneys, the right one the sorest. Sharp pains in my bowels, near the caecum; some trembling (when asleep it awoke me) in my right arm and left leg, with a sharp pain near the ankle joint.

January 15th. Feeling good this a. m. Pulse, 72. Temperature, 98. A good day. Some pain in generative organs. Urine muddy. Stitches in heart, left to right, and in right lung to right arm. Heart beats felt all over my body. My body throbs and can feel and hear it, as if it was some laboring engine. The arctic feelings are there, but not so very hard to bear. As compared to other days have felt good.

January 16th. Very weak and staggering. Throbbing through my head and body. Very acid stomach. Stitches in heart and through the left lung, and bones of the left and right little fingers, and middle third of each thigh. My pulse is now 60, full but oscillating or pendulous. Temperature, under the tongue, 97 2-5. A very good day. Comfortable. All the above described feelings but all very light.

January 17th. Feeling about in my usual good condition; only a very little trembling; on speaking some words in a hurry, a slight stammering.

January 18th. Giddy head, pain in the neck and across the kidneys, and down the outside of left thigh. Coldness at times, and have not courage enough to face the wintery storm; I chill through so soon. Pain in my heart a good deal. This 8 a. m. my pulse is the best I have felt for a month, 76, full and regular, no oscillating. Temperature, 98. Bowels regular. Urine clear and normal color. Specific gravity, 10.05. Very fair day. Pain in neck and slight giddiness is all that I have experienced since rising this morning. An emergency call for a miscarriage put me into such a trembling fit that it was some time before I could so master it as to enable me to do my duty, and left me in such a weak state that it was difficult to hold still enough to prepare the needed medicine for the patient.

January 19, 1893. Awoke in the night with very severe gastric burning. Acute gastritis; passed large quantities of urine three times in the night.

7 a. m. Pulse 64. Temperature 96 4-5. Some coldness in my intestines, but no pains. Mind clear.

January 20th. Awoke this morning in a shivering fit. Trembling, giddiness and headache, but not very severe. Cold arctic feeling. Pulse 68. Temperature 97 15. My feet, 8 a. m., cold. Severe pain in left testicle, extending through to the back to anus. Bleed very much from old piles. An aching at end of penis, and no sexual desire. A feeling as if the testicles were swollen, and painful, as in orchitis; this is only a transient pain, and comes and goes at infrequent periods, or remittent in their character. I notice my urine is taking on the greenish-yellow again, and my right arm is chilly from the arctic rays. My feet are cold, and the coldness

creeps up higher in my legs. A great deal of arctic feeling in and around my heart. My breath is cold. Headache, but mind clear. Cold chills run over me in various parts of my body. My hands tremble very much at times, so that I cannot write. Pain in testicles and coldness, as if they were frozen. Pass a large quantity of urine.

4 p. m. Burning in my face, while other parts are arctic cold in spots. Pulse rate 70. I thought, perhaps, I was going to have some fever. Temperature 98 2-5. This is two and a half hours after lunch. Urine, specific gravity, 1010; clear, but greenish-yellow. Headache and neck pain; chilly and trembling more to-day than for the last few days. A good deal of pricking pain in my heart, with coldness and stinging in my right lung. No cough; dryness of my throat, with tickling in my fauces; tongue clean; bowels regular, soft, but requiring force to expel, and followed by some bleeding. Coldness of generative organs. Some very severe itching of the skin all over my body, like insects were crawling over me. So realistic was the feeling that I have stripped to hunt for the bugger, but have found nothing, not even the bitten place.

January 21. 8 a. m. Did not get up before, owing to the pressure in my skull, as if it was too full; dropsy or some swelling of my brain; giddiness, and a numbness down my left leg, and a jerking upward in both of them. Some trembling and coldness around my heart, and in my lungs and down my arms. My feet were very hot in the night until 5 a. m., when they became cold, numb and jerky, upwards. My pulse rate is very slow this morning, only 56 beats. Temperature is slowly forced up to 98. I have a sensation as if my left cheek were swollen, but it is not so. Trembling very much in my hands.

2:30 p. m. Have not been warm yet to-day; very intense arctic sensation in my body and heart and lungs. Slight cough. Numbness in my right arm. Much trembling, and a sensation of inward trembling in all parts of my body. Generative organs frozen cold, and this coldness extends up my back. My feet so cold that I have burned my boots, and yet cannot get them warm. Coldness extends up to my knees. Stiffness and pain in left thigh. Cold arctic band round my head, with fullness in skull. Pulse 60. Temperature 97 4-5. Good appetite. Mentally clear, although very weak; very tired and discouraged that these feelings last so long. They seem to be all beginning over again; worse now than they were a week ago. I feel more like giving up and going to bed sick, but I cannot afford to do so, so I brace up and resist this temptation to try and find an antidote for these recurring series of feelings.

9 p. m. Coldness still the most prominent and persisting feeling. Throbbing all over. Coldness round my heart, and a numbness through my limbs, and giddiness. Pain in left scapula and right testicle, shooting or bearing up my right groin; feet and legs cold to knees. My pulse beats 64. A feeling of heat in my face. Flatulence. Urine muddy. A perfectly stiff, numb feeling in my left arm, so that I had to twist it about a long time before I could use it. A paralytic feeling. I have a feeling of fullness in my chest, so that it requires an effort to breathe or inflate my lungs; they seem stiff and hard to inflate.

January 22, 1893. Do not feel so well this morning, an oppressed feeling on the top of my head. More to the right temporal bone. Broken sleep; dreamed I was attending cases of malignant diphtheria and, strange to say, these cases in my dreams have been subjects of my dreams at three separate times during these provings. *Pyrogenium* 6th was my remedy on which I relied to the exclusion of all others, and cured my cases; so my dream was. My mind seemed very much strained between that or *Tarantula*, but succeeded in a week in curing them. Every day's care noted in my dream. And what a dream! Awoke and sleep to dream it all over again; was not worried much about it, only it seemed hard that Brooklyn physicians will still come into my district and never say one word about the one who is trying by pioneer work to establish confidence in Homoeopathy. This was a worry to me in my dreams. So far as I know we have not a case in our town. Very weak and very oppressed for breath; the least exertion takes it away, and have hard work to get my lungs into play again. I have some cold

feeling round my heart and in my right lung; a slight hacking cough and great pain in the bones of my left leg. Coldness in my extremities very severe, and at the back of my neck. My pulse rate, 60, this a. m., full and round, but some of the beats seem as if they were too modest to come up to my fingers as strong as the others do. Temperature continues below normal, 97 4-5. My mind continues clear and appetite good, bowels regular, but very dark, soft, and difficult to expel; piles are swollen, itch and bleed. Urine clear, yellow, greenish color again. Specific gravity, 1005. Acid reaction; a good deal of acid burning in my stomach. Gastritis sensations. Flatulent rumblings. No medicine now for many days, and yet I suffer.

9 p. m. Giving up the day. I am very weak, and, oh! so tired, and need rest and warmth. My heart has pained me greatly to-day, and coldness prevails throughout my body. Pulse 68. Temperature 97 3-5. Dryness in nostrils and ears; hard wax. Coldness in generative organs; pain in arms and back of head; not so much trembling. Breathing is easier; can expand my lungs with less difficulty.

January 23. Slept well until 5 a. m.; then awoke with pains in head and burning in my feet, with some trembling and stiff feeling in my lungs and heart, as if they were tied or unable to move. As I lay awake I could hear my heart pounding away, but, oh ! so slow. Felt very weak and wanted to stay in bed, but after some hard thinking I got up.

7 a. m. Very weak; staggered about while dressing. Pains in the base of the brain. Pulse 64 and irregular in its beats, some of them failing altogether to declare themselves only by their absence to respond. Temperature, after being held under my tongue ten minutes, 97 2-5. Very cold in my back and over my shoulders; hands and feet are blue with cold. Itching all over my body, and as if I was bitten with fleas or bugs were crawling over me. Skin of my hands very rough and cracks are in them. My ears have a feeling as if wax were running out of them. Dry, itching scurfs in my nostrils; the left one worst.

9 p. m. A comfortable day. Not much of my old feeling, and more cheerful.

January 24th. Slept soundly until 3 a. m. Pain in distended bladder awoke me. Pain under pubes and along penis. Passed a large quantity of water; the flow very slow, as if the passage were constricted by the hard spasm and pain. Feet burning and head hot and full, as if there were not room enough in the cranium. Had to cool my feet, by putting them out of bed, before I could go to sleep again.

6:30 a. m. Great deal of stretching, as if I had clavicus spasms. Lumbar muscles are very stiff and sore and aching, and my neck at the base of the brain slightly so; otherwise I feel comparatively comfortable. Pulse beats 60 at 8:30; full, round, with some irregularity. Temperature 97 4-5, which is an improvement. No dreams. What a blessing to feel free from such constant internal coldness! Very little to note today.

9 p. m. Only just enough to remind me of my old troubles. After getting into bed a very severe trembling came on in my right kidney.

January 25, 1893. Hurried this a. m., so could not take an account of pulse or temperature, but remember that when dressing felt very heavy feeling; hard to move and very lightheaded; not really dizzy; had bad dreams about dead people and graveyards; pained at so many as thirty bodies being put into one grave. Pulse rate 68; very full, and I can feel the beating of my heart in all parts of my body; heart bounds as if it had not sufficient room in my chest, and shakes my body or vibrates all over. Hot face; flushed. Temperature 98 2-5. Trembling in my hands. Hot, full feeling in my head; feet burn as if they were recovering from being frozen; this burning in my feet would not let me sleep. Had a good deal of pain in my bowels; acute pain, like pin pricks, in my artenoid muscle: difficult to swallow; the old headache and neckache; can write better to-day; not so much trembling, and have more control of myself.

January 26. Very weak; stiffness in hips and loin; giddiness if I move quickly; sleep well; no dreams. Pulse 60, very irregular; temperature 96 4-5; cold feet and hands, and pain and stiffness in back of neck; aching extending inward to brain; pain over left temple, shooting inward, very sharp; eyelids glued, passed more water of a pale straw color; no green hue, my hands do not tremble so much, I can write better and longer, without the strain to keep them steady.

1 a. m. Feel very ill; head heavy and painful, from back of neck forward, and very weak; want to go to bed, but dare not, must not give up; want to write, but cannot. Pulse rate, 64. Very oppressed feeling with coldness at my heart. Difficult to breath, as if it were too hard to do so. Temperature 98 1 5. Severe coldness across scapulae, hands trembling very much, so that it is very hard to control them to write my notes.

10 p. m. It has required a mighty effort to keep up this day. My pulse 56, slow and irregular; temperature 98. Headache, yet mind clear; backache. Weakness in all my body; my limbs so weak in walking that it was difficult to keep going, and felt as if I could lay down or drop down anywhere. What heart failure symptoms are I do not know, but fear I came very near it and yet I have resisted this feeling, and kept awake and about. Have felt very ill all the day, and am so now on retiring, 11 p. m.

January 27. 8 a. m. Very low, oppressed feeling; head bad; sneezing. Bone pains as if I had an influenza coming on, but have none. Feet very hot in the night; had to put them from under the bedclothes in order to sleep. Very heavy this a. m. Temperature 98. Body pains and weakness all the day; was compelled to lie down and sleep. Head full. Throat sore, phlegmy. Bowels loose, urine high colored, clear, no smell. Pulse at 10 p. m., 60, irregular. Temperature 98 1-5. No chilly feeling; but hot thermal heat rays pass through my whole system. Not able to confine my mind to any object; restless fidgetiness.

January 28, 1893. Very violent headache over right temporal bone, almost as if I had a tumor forming and pressing within the skull, affecting the whole right side of head, and producing numbness down the left side of my body. Very chilly, and watery eyes. Temperature at 3 p. m., 97 2-5. Sore throat, and hot feeling in head and throughout my body. The sore feeling extends over the temporal bone and right side of my head, and down my right cheek, and affects my teeth, or the place where I used to have them; but it seemed as if the teeth in my palate were all sore and inflamed, gums swollen, and as if the molars were elongated and pressed out of my gums, for they gave great pain when chewing my food.

January 29. 9 a. m. Just after breakfast, pulse 68, temperature 99; slept very heavy, but dreamed of treating many cases of black diphtheria. Awoke, slept, dreamed the same dream again, and again the same dream, three separate times. How very singular! During these proving, I have done this three separate times. Three dreams in one night - the same dream, the same disease, the same families in my dream. This singularity caused me to lay awake wondering what this can mean. I have not any patients suffering from this disease, and I do not know of any in the town, and nothing that I know of to bring this disease to my mind. Awoke feeling very stiff and sore.

February 7, 1893. Was called to see a case of diphtheria, black, like what I saw in these dreams, but she died, having been doctored by an old-school man in New York city for rheumatism. Since then I have had no cases in this town that lingered until I gave the medicine of my dream (but which I saw contained a clear picture of these cases). Came far down the dorsal muscles and vertebrae, extending upward. A sensation as if insects were crawling over my skin. Fleabites here and there. (Watched one such spot, where it felt as if a bug was biting, with a magnifying glass, and it appeared to be caused by an effort of one of the pores of my skin to suck in a tiny piece of dust or wool. This has led me to ask: Are a part of the pores of our body absorbents as well as exhalers or excretory ducts? It may be worth more study.)

11 p. m. This day it has been very hard to keep up and doing. Pulse 60. Cold, arctic feeling in my limbs, lungs and heart. A short, hacking cough which hurts my left scapula, and I have a stiff, lame feeling down my left arm; very tired and giddy.

January 30th. Head pains again, the same old character. Sensation of swelling in my face and pain in nerves of teeth molars. Hot feeling. Pulse, 68. Temperature, 99. Very weak, but my mind clear. Much trembling and the oppression round my heart and chest producing a suffocating feeling that makes me afraid, and I must now seek some means to arrest this difficulty and give me some relief. I know it looks cowardly to give up, but my family compels me to do something to enable me to keep about. I cannot do any more; this heart oppression makes me think of heart failure. Pulse 56, and temperature 96. Very weak. I hope it will wear away and this trembling improve, They have been caused by this drug, one of the most powerful. I gave up and went to bed very ill. I had to keep it from my family, but I was afraid my heart would stop beating and had a very restless night. I took acetic acid, as vinegar I had in some pickles I thought changed or relieved the first class or effort of provings and caused me to stop and begin again. I think it did help me. Next day very prostrated but did not take any note of my pulse or temperature, because I had began to try to find an antidote, and this vinegar and lemon juice has relieved many of them. I fear sometimes that the trembling in my hands may never fully leave me now.

February 12, 1893. Copying my notes has brought so vividly to my memory that I can almost feel the old arctic rays through my body, and the giddiness and staggering gait of the *Heloderma hor.* days. I hope that you may have many others more courageous than I have been, whose provings will compare or improve upon this poor effort of mine."

Robert Boocock, M. D.

(Robert Boocock, M.D., Flatbush, N.Y., Proving of *Heloderma horridus*, the Gila Monster, The Homoeopathic Recorder vol. 8 (1893), p. 97-103, 145-163)

"In my last letter the passage referring to kings and queens giving or offering to give large sums of money for a moment of time was rather foggy. What I was trying to say is that this medicine has power to arrest the process of death from paralysis of lungs or heart failure, and to restore the sufferer to healthy, though it may be feeble life. I am trying to use this powerful medicine, to look through it (as through a microscope) at a class of nerves not fully known, and am repeatedly asking myself: What is heart failure? What is paralysis of lungs? And am so far compelled to believe that these are caused by a paralysis of the great sympathetic nervous system or the various motor nerves. But I must not say any more about these, for I know very little about them and I fear very little is written about them. Would it not be wonderful if it is found through some such drug proving as this that all the diseases, mental and physical, are caused by some of the finer nerves, nerves too fine for the most powerful microscope to see under post-mortem examination! Those nerves or muscles which cause a blood corpuscle or disk to expand or contract, or a cell of the brain, or air cells of lungs, for I take it than in a lung paralysis it does not take place all at once, but it must begin in some one finer cell and then spread by gradual loss of contractive or expansive power, by a class of nerves on which thought and will have no power. All this kind of thinking has been caused by the effects of *Heloderma horridus*, my proving of it and experience with it."

(Robert Boocock, M.D., *Heloderma horridus* in heart failure and paralysis of the lungs, The Homoeopathic Recorder vol. 9 (1894), p. 628-629)

1894 - A young man who laughed at the proving of Dr. Boocock took six doses of the sixth potency in a spirit of bravado

"The publication of the schema of Dr. Boocock's proving of *Heloderma horridus* in this issue reminds of the RECORDER reminds us of a little incident in connection with this proving that is not without interest. Quite a number of those who read the proving shrugged their shoulders and cried "too sensational." Among these was a young clerk in the employ of Boericke & Tafel. He laughed at the whole thing, and in a spirit of bravado begun to take the remedy, six doses in all, of medicated pellets of the 6th potency. On the second night he awoke, and the first impression that flashed on his mind was that he was under the influence of the *Heloderma*, and it was not a pleasant sensation by any means. He felt a cold sensation creeping down his body and legs, and was in a *very* cold and clammy sweat. This lasted all the remainder of the night, and he was unable to go to sleep again; by morning the disagreeable experience began to pass off and he felt no more of it."

(The Homoeopathic Recorder vol. 9 (1894), p. 506)

1898 - Symptom-Register - Hugh A. Cameron

"This poisonous lizard is a native of Arizona, New Mexico and Texas, and derives its common name from the Gila (pronounced Hee-la) River in Arizona, in the desert around which numbers are found. The method used to obtain the poison was by irritating the animal sufficiently to cause it to spout the saliva while biting, on a glass or porcelain dish. Dr. Charles D. Belden, Phoenix, Arizona, secured a few drops of pasty, yellow fluid in this way, and this was preserved in sugar of milk and potentized for proving. Dr. Robert Boocock, Flatbush, L. I., N. Y., made a proving upon himself first with the 6x potency, and later with the 30th potency, in December, 1892, and January, 1893. The proving, which was published in the *Homoeopathic Recorder*, 1893, pp. 97-103 and 145-163, is herewith reproduced in schematic form.

Clinical Authorities. - *Chorea*, Dr. Robert Boocock, *Homoeopathic Recorder*, 1893, p. 163; *Sensation of great coldness*. Dr. Charles E. Johnson, *Homoeopathic Recorder*, 1894, p. 141; *Collapse (heart failure)*, Dr. Robert Boocock, *Homoeopathic Recorder*, 1896, p. 66; *Locomotor ataxia*, Dr. E. E. Case, *Medical Advance*, July, 1897; *Paralysis agitans*, Dr. Robert Boocock, *Homoeopathic Recorder*, 1893, PP- 162-163.

Mind.

No inclination for exertion in any way.

Difficulty in remembering the spelling of simple words while writing.

Depressed; feels very blue.

Disinclined to talk.

Very irritable; easily provoked.

When excited could not get hold of the right words and dropped some when speaking from a want of flexibility or a catch in the tongue.

Mentally restless; not able to confine mind to one object.

Mind unaffected during the headache and other violent symptoms; remains clear throughout his sufferings.

Sensorium.

Vertigo and weakness when moving quickly.

Dizziness with inclination to fall backward.

Sensation as if would fall on right side; desire to bear to the right side and could not walk straight because of this; had repeatedly to stop or step to the left to get a straight course.

When bending forward, inclination to fall forward or backward.
Weak, giddy, making it difficult to stand.
Unable to balance himself, accompanied by nausea.

Head.

Sensation of heat in head; heat on vertex.
Pain and throbbing in top of head; head feels sore and bruised.
Pressure in head and scalp; pressure in skull as if too full.
Head very painful as if a large cover over it, drawn very tight.
Sensation of a band around head.
Cold band around head, with fulness in skull.
Sensation as if scalp were drawn tight over skull.
Headache over right eyebrow
Brain feels as if scalded.
Soreness and stiffness in occiput, extending down neck.
Sore spots in various parts of head.
Intense pain over left eyebrow, through eye to base of brain and down back.
Pain in head and back of neck going down back and right leg.
Aching at base of brain.
Pain in head and soreness relieved by copious flow of wax from both ears, but especially from the left.
Pain in the head, only on the left side.
Sharp, digging pains in left side of head.
Sharp pain shooting through head from over left eye towards occiput.
Sharp pain over left temple shooting inward.
Benumbed feeling all over head.
Burning feeling in the brain.
Cold pressure within the skull.
Pain in frontal and occipital bones.
Fulness in the head.
Bores head in pillow because of pains in head.
Pain and pressure within the skull from the vertex to the occiput and from back forward over left eye.
Pain beginning in the right ear, extending round the back of head to left ear.
Headache over right temporal bone, as if a tumor were forming and pressing within the skull, affecting the entire right side of head and producing numbness down left side of body. Pain extends from head down right cheek and affects teeth.
Intense pain in back of head near atlas to root of ears on both sides.
Queer sensation in central part of frontal bone wakened him from sleep.

Eyes.

Itching of eyelids; lachrymation.
Eyelids glued together.
Weight of eyelids, difficult to keep them open.
Astigmatism. When looking at stars or distant lights there always appeared a cluster of lights below to the right of the main one. Comet-like tail to stars appearing on upper left side.
(Symptoms in prover removed by the drug.)

Ears.

Pressure behind left ear; pressure in ear from within outward.
Copious flow of wax, more free on left side.

Ears dry and scurfy.

Pain beginning in the right ear, extending round the back of head to the left ear.

Nose.

Left nostril sore; ulcerated.

Dry, itching scurfs in nostrils, worse left.

Severe attack of sneezing. Fluent discharge.

Nostrils dry.

Face.

Sensation of heat. Flushes of heat.

Cold, crawling feeling from temple down right cheek.

Sensation as if left cheek were pricked with points of ice.

Sensation as if facial muscles were drawn tight over bones.

Stiffness of jaw.

Sore, stiff feeling at parotid gland.

Burning in face while other parts are cold in spots.

Dryness of lips.

Teeth and Gums.

Toothache, gums swollen; sensation as if molars were elongated; painful when chewing food.

Tongue.

Tongue tender and dry.

Tongue cold.

Mouth.

Soreness.

Thirst.

Very thirsty.

Throat.

Dryness; parched sensation.

Tingling.

Soreness; tenderness to touch externally.

Stinging, sore feeling in right tonsil.

Dryness of throat, with tickling in fauces.

Swallowing difficult.

Stomach.

Acid burning in stomach.

Hypochondria.

Gurgling in region of spleen.

Sensation as if waist band were too tight.

Abdomen.

Sharp shooting pain in bowels, more on left side.

Pain across pubic bone, extending down into left testicle.

Stitching pains in bowels as if filled with pins; wakened him from sleep.

Throbbing in bowels.
Rumbling in bowels.
Stitches in abdomen followed by copious loose, lumpy stools of good color.
Pain in left hypogastric region wakened him at night.
Sharp pains in region of caecum.

Stool and Rectum.

Loose, copious stools, lumpy, preceded by stitches in abdomen.
Stool loose, mushy, with considerable flatus.
Stool dark, soft, yet difficult to expel.
Haemorrhoids swollen, itching and bleeding.
Much bleeding from old piles.

Urinary Organs.

Bladder irritable; frequent urging to pass urine.
Unable to retain urine any length of time; urging with small quantities.
Tenesmus in urethra with sensation of discharge.
Flow not so free as usual; intermittent flow; slow as if urethra were constricted by spasm and pain.
Urine profuse and pale during night; profuse pale urine of sp. gr. 1000; specific gravity ranges from 1005-1010; greenish-yellow; thick like milk after standing a short time; fetid with odor of decaying fruit.
Slight scalding on urination.

Male Sexual Organs.

Erections.
Cold penis and testicles, with gluey discharge.
Pain and enlargement of left testicle.
Sharp stinging in left testicle.
Pain in back, lame feeling, and across pubic bone, extending down into left testicle.
Tenderness in urethra.
Cold feelings in genitals.
Severe pain in left testicle extending back to anus.
Aching at end of penis; no sexual desire.
Transient pains and sensation as if testicles were swollen.
Pain in testicles and coldness as if they were frozen.
Pain in right testicle shooting up right groin.

Respiration.

Fulness in chest requiring an effort to inflate the lungs; lungs seemed stiff and difficult to inflate.
Oppressed for breath from least exertion.
Breathing was hard and sounded as if drawing breath through iron pipes; during fever in night.
Breath is cold.

Cough.

Slight hacking cough with pain in left scapula.

Inner Chest and Lungs.

Stitches right lung to right arm.

Cold feeling in right lung; coldness and stinging.

Wakened by a feeling as if something had exploded in right lung; pain deep in chest toward left scapula.

Stitches in heart and through left lung.

Trembling and coldness in lungs.

Heart, Pulse and Circulation.

Pressure at heart.

Tingling around heart.

Trembling and coldness around heart.

Oppression around heart.

Sticking pains, starting from left to right.

Stitches in heart from left to right.

Soreness in heart, more under left nipple.

Twitches about heart as if blood had difficulty in entering or leaving heart.

Heart beat felt all over the body; body throbs, he can feel and hear it, as if it were some laboring engine; slow labored thumping of heart.

Coldness in and around heart.

Pricking pain in heart with coldness and stinging in right lung.

Pulse 56-72; full; jerky; irregular.

Outer Chest.

Pains in right breast.

Pain in region of left nipple changing to right nipple.

Sharp stitch through right nipple to inside of right arm.

Neck and Back.

Neck stiff and painful, yet can move head freely and without increasing the pain.

Stiff neck; aching in bones of the neck.

Painfulness of upper neck, region of atlas.

Intense pain in back of head near atlas to root of ears on both sides.

Pain and throbbing in cervical vertebrae and dorsal and lumbar muscles.

Coldness across scapulae.

Pain in left scapula.

Chill in back from base of brain downwards.

Pain in back; intense pain in lumbar muscles awakening him from sleep.

Aching in right kidney; stitch-like pain in right kidney.

Pain in back; lame feeling, and across pubic bone, extending down into left testicle.

Throbbing and aching in upper part of kidneys, especially the right.

Burning along spine.

Upper Extremities.

Numbness of right arm and hand with trembling.

Tingling down arms and hands to finger tips.

Tingling in palm of left hand and along fingers.

Drawing in left hand followed by tingling and prickling; tingling feeling ran up left arm with jerking, and caused a twitching or jerking in head as if it were being drawn to left side.

Pains in hands if holding anything for some time.

Trembling of hands.

Hands blue, cracked and rough.

Trembling of arms; difficulty in holding band steady when reading and writing.

Cold feeling in right biceps.
Pain in right elbow joint.
Stitches through bones of little fingers.
Trembling and coldness down arms.
Stiff, numb, paralytic feeling in l. arm.
Twinges in left arm and leg.
Trembling in arms and thighs awakened him out of sleep; trembling in right arm and left leg.
Hands and feet blue with cold; cold as ice.
Cold feeling in right arm, elbow joint, right thigh and left foot.
Coldness outside of left leg, inside of right arm.

Lower Extremities.

Numb feeling around and down l. thigh.
Painful boring feeling in middle third of left thigh.
Pain in l. thigh and calf as if bruised.
Stitches through middle third of each thigh.
Numb feeling down r. leg; down l. leg.
Jerking upwards of legs.
Coldness extending from knee to calf.
Coldness of legs and feet; coldness up to knees.
Boring sharp pains in tibia of r. leg with twitchings of arm and leg.
Sensation of tight band around left ankle, as if it would cut foot off.
Trembling. Jerking.
Pains in bones of l. leg.
Tingling and burning of the feet as if recovering from being frozen.
Feet hot during the night until 5 A. M., when they became cold and numb and were jerked upwards.
Burning in feet preventing sleep, had to put them out of bed.
Stiffness and pain in l. thigh.
Sensation as if walking on sponge and as if feet were swollen; a springiness and sense of looseness in stepping, which requires caution, as if he were not sure of his steps.
Staggering gait.
Tendency to turn to the right when walking.
Twitching as if foot would spring when walking, making him walk as if he had the "cock's gait."
When walking lifts feet higher than usual and puts down heel hard.
Stiff, full feeling in buttock as if could not move, but when he does move he is surprised at the easy way he can do it.
Cold feet; cold as ice; tingling sensation as if recovering from being frozen.
Burning in feet wakened him; had to put them out of bed before could go to sleep again.

Extremities in General.

Limbs cold; could not be made warm over a hot register.
"Arctic coldness."
Stiffness throughout all limbs.
Trembling and jerking of limbs.

Motion, &c.

Trembling and weakness when starting to walk, after resting in a sitting position.
Staggers about bed-room while trying to dress.
Plenty of strength but unable to balance himself; when he puts forth an effort staggers about

like a man with paralysis or locomotor ataxia.
Stretching relieves pains in muscles and limbs.
Moving does not increase the pain.
Stiffness and painfulness in different parts, yet can move them freely and without increase of pain.

Nerves.

Easily startled from sounds, with trembling; startled from sound of bell ringing.
Tired feeling.
Very weak and nervous.
No inclination for exertion in any way.
Trembling of left side, hands shaky.
Tremblings.
Trembling can be controlled by effort of will.
Feeling of great prostration; conscious of it even in dreams.
Numb feeling along left side.
Restless at night.
Trembling for a few seconds at a time when quietly reading or writing; shakes whole body and prevents reading.
Twitching and trembling of groups of muscles.
"The result of the bite is a benumbing paralysis like to paralysis agitans or to locomotor ataxia. There is no tetanic phase - a condition almost reverse in objective symptoms to Hydrocyanic acid or Strychnia." (Prof. Sir John Lubbock.)
" Dog bitten on nose exhibited symptoms like those a horse has when suffering from 'blind staggers,' but soon began turning itself around in a circle and in about twenty minutes fell dead." (John A. Spring, *Chambers' Journal*, 1890.)

Sleep.

Drowsiness but inability to sleep.
Lay quiet as if in a stupor.
Restless sleep; awakens at 3 A. M.
Sleepless after 1 A. M.
Wakened from sleep by pains at 3 A. M.
Wakened from sleep by pains in various parts, by dreams, by trembling in arms and thighs, by jerking in head, &c.
Dreams of urinating in bed; of hearing telephone bell ring; of dead people and graveyards; physician dreams of attending cases of malignant diphtheria.

Fever.

Internal coldness, from the heart; as if he were being frozen to death internally.
Coldness from within outward; as if filled with a deathly coldness; ameliorated after eating hot sour pickles.
Severe chill ran down back from base of brain to buttocks.
Cold rings around body, beginning between shoulderblades.
Cold waves ascend from feet or go downward from base of brain.
Wakened from sleep by a cold sensation creeping down body and legs; very cold and clammy sweat. (*Horn Recorder*, 1894, p. 506.)
Coldness causing trembling.
Chilly feeling in various parts of body.
Sensation as if a cold freezing wind were blowing upon him from the bend of his knees.
Chilly feeling running from the superior maxilla to chin.

Cold spots in various parts of the body.

" Arctic coldness " in various parts.

Temperature sub-normal 96°-97°.

Arctic coldness throughout body except head and face, with great tiredness and aching in bones; feels as if frosty winds were blowing through holes in his garments and freezing his flesh.

Chill wakened him in afternoon; cold waves from feet upward.

Coldness amel. by hot food.

Shrinks from exposure to weather; inclined to sit over the register.

Hot feeling in head and spreading down back.

Feverish during night; parched.

Feet very hot; heat throughout body soon passing off, followed by arctic coldness but no chills; these sensations alternated for some time.

Absence of sweat.

Directions.

Stitch pains going from left to right.

Sensations.

Sensation in various parts as if a needle were being thrust into flesh.

Throbbing all over the body.

Intense aching in bones and all parts of the body.

Sensation of inward trembling in all parts of the body.

Aching similar to what one feels at the beginning of influenza.

"Arctic coldness."

Skin.

Itching of the skin as from insects.

Petechiae.

Stages of Life.

"A young miner was bitten. Although previously in the best of health he at once began to lose flesh, became melancholy, and died in a few months in the manner of those who succumb to what in Germany is called the galloping consumption." (John A. Spring, *Chambers' Journal*, 1890.)

Those who have been addicted to alcohol are more seriously affected by the bite. (Belden.)

Relations.

Vinegar and lemon juice relieved some of the symptoms."

(*Heloderma horridum* (Suspectum), arranged by Hugh A. Cameron, M.D., Philadelphia, Pa., *Journal of Homoeopathics*, edited by J. T. Kent, vol. 1 (1898), p. 295-306)

Heilungen / Cures



Heloderma horridum

Heilungen / Cures

Übersicht / Overview

1894 - Pneumonia in an apparently dying woman 81 years of age - Robert Boocock

1897 - Locomotor ataxia in with woman aged 55 - Erastus E. Case

1894 - Pneumonia in an apparently dying woman 81 years of age - Robert Boocock

"Mrs. Ford, eighty-one years of age, has been my patient several times during the last four years. She suffered from erysipelas and dropsy in the legs. In September I was again called in for the same old trouble; the usual remedies were effectual. In October she caught cold, and had also a bad fall; her symptoms were that of pneumonia, fever, delirium and cough, pain in chest and hard work to breathe, blueness of lips, tongue and cheeks, cold extremities and was very low in appetite, and appeared to be sinking. Pulse, fifty; temperature, ninety, and to all human appearance was rapidly dying; all said so, and I fully believed so, but left *Heloderma horridus*, one powder in water, and ordered her tongue to be moistened with a feather dipped in this every half hour. I did not call the next day until evening. I was waiting to be notified of her death, but no such notice coming called to see, and to my surprise, found everything changed. I then gave *Heloderma horridus* 200, every four hours, with placebos. All the bad symptoms gradually disappeared, breathing became natural, heart gained strength, pulse increased to seventy, temperature to ninety-eight, and appetite become better, asking frequently for food. This continued so long as she was taking this medicine. She was so well that I ceased to attend, she having no aches or pains, was eating and sleeping well, bowels moved regularly and night watching was given up. All who saw the recovery were pleasingly surprised, and so was I, and have frequently asked myself could anything else have done this? *Lachesis* has changed a slate-coloured tongue, and has aroused those who appeared to be dying for a short time, but to extend the life of one as good as dead for thirty days is a triumph for the *Heloderma horridus*. Will others try it and report? I know this one case does not establish anything, but makes one think and wonder, and being near to the symptoms produced when proving it, gratified me in trying it."

(Robert Boocock, M.D., *Heloderma horridus* in heart failure and paralysis of the lungs, *The Homoeopathic Recorder* vol. 9 (1894), p. 629-630)

1897 - Locomotor ataxia in with woman aged 55 - Erastus E. Case

"An auburn haired woman, 55 years of age, had numbness in the feet two years ago. It has gradually extended upward until it now includes the lower part of the abdomen. Tingling, creeping sensation on the legs, as if from insects. Worse when lying in bed at night. Worse from exposure to cold air. Worse from touch, she cannot endure to place her bare feet together. Legs insensible to an electric battery. Legs wasting away, skin very dry and inelastic. Ankles turn easily when trying to walk. Numbness of the arms from the hands to the elbows. Forgetfulness. Melancholy, with weeping. Worse in stormy weather. Worse when thinking of her ailments, cheered by company. Pain in the forehead in the morning, aggravated by turning the eyes. Tongue dry and cracked in the morning. Swallowing difficult. Empty eructations, especially before breakfast. Empty, gone sensation in the stomach. Dislikes sweet things and worse from taking them. Sensation of constriction about the whole abdomen. Constipation from torpor of the rectum. Haemorrhoids and itching of the anus. Burning in the urethra during and after micturition. Burning and dryness of the vagina. Palpitation and dyspnoea from slight exertion. Drawing sensations in all the extremities.

Yellow skin.

Apr. 11, 1895. *Heloderma horridus* 900 Fincke, four powders, one every four hours.

Apr. 23. Decidedly more cheerful and memory is better. Bowels more active. Legs more reliable while walking, with less numbness and tingling. No medicine.

Apr. 26. She is alarmed because the palms and soles are swollen and itching. No medicine.

May 22. She gained rapidly in both flesh and strength until a week ago. *Heloderma horridus* 45m Fincke, one powder.

Soon after this an itching eruption came all over her which subsided without any further medication.

She was restored to a fair degree of health so that she has taken care of her house and family up to the present time."

(Erastus E. Case, M. D., Hartford, Conn., Clinical experiences, Locomotor ataxia - *Heloderma horridus*, Proceedings of the International Hahnemannian Association 1897, p. 182-184)

Klinische Hinweise / Clinical Hints



Heloderma horridum

Klinische Hinweise / Clinical Hints

Übersicht / Overview

1893 - First clinical experiences - Robert Boocock

1894 - Clinical hints

1895 - *Heloderma horridus* in heart failure - Robert Boocock

1899 - Clinical experiences with *Heloderma* since the proving - Robert Boocock

1893 - First clinical experiences - Robert Boocock

"The case of paralysis that I spoke of, whose staggering gait was called to my mind by my feelings, is now taking *Heloderma hor. c. c.*, twice daily, for the last two weeks, and is steadily improving. This case has been under treatment for thirteen years, the last year under my care. He certainly is better.

H. S., a young man, suffering from chorea (St. Vitus dance), who has suffered with blue cold hands since I cured him of paralysis, following malignant diphtheria. He has been taking *Heloderma hor. c. c.*, nightly for two weeks, and says he is better, never better in his life.

Mr. G. S., aet. 53. Paralysis agitans; left side. Cold hands and feet; clammy, cold sweat. Has been taking *Heloderma hor. c. c.*, four times daily for a week, and is now able to be up and about. The trembling is not all gone, but so much better, and only now comes when overexcited or very tired. Is now improving finely. Taking it once daily."

(Robert Boocock, M.D., Flatbush, N.Y., Proving of *Heloderma horridus*, the Gila Monster, The Homoeopathic Recorder vol. 8 (1893), p. 162-163)

1894 - Clinical hints

"In administering this remedy care should be taken not to give it too frequently else there may be serious and unlooked for aggravations. Like *Bacillinum*, it is an infrequent remedy and should, perhaps, not be given oftener than two or three times a week. It may be had in potencies from the 6th to the 30th, 100th and 200th. It is suggested as a remedy for paralysis agitans, and might be found useful in any chronic abnormal movements of any part of the body. It might also be thought of for people with cold, fishlike hands. It is certainly an interesting remedy, and one that when understood may occupy a very important place."

(The Homoeopathic Recorder vol. 9 (1894), p. 506)

1895 - *Heloderma horridus* in heart failure - Robert Boocock

"The alarming number of deaths reported daily in the public press of heart failure should constrain some to seek the cause or causes of this. The various boards of health in cities and towns, are and have long been willing to accept heart failure as a satisfactory (to them) cause of death. These deaths are of various ages, from the infant of days to the aged. All along the line of years public report says that they died of heart failure.

In years past many words have been used of doubtful meaning by physicians and accepted as satisfactory causes of death. Sixty years ago we were often told that the reason a person died was for want of breath. At that time many with the prospect of death before them would often plead with the doctor of that day to be let die sober. Alcohol and laudanum were the common means used to soothe the way to the ending.

Then came the term "general debility" and again the heart-clots as the cause of sudden death, but while it was true that the blood-clots could be found in the heart after death, yet no one

could positively say whether the clot was formed before or after death. And so these and many others have served their day and gone. But surely this term "heart failure" is not of the same character. It should at this advanced day mean more than any of those worn out expressions, because we have greater scientific light shining upon us from many sides. The microscope, spectroscope, chemical discoveries, and drug provings have all been used to make the physicians of to-day better than those of the past. And, therefore, heart failure should not be classed among the past meaningless words used to describe the cause or causes of death.

Again, what is the cause of heart failure? The wearing out of the tissues might be a true cause if all the cases were aged people, but when a man in the prime and vigor of life, fully engaged in doing a manly part in life's conflict is seen to stagger and fall and be found dead by those who first come to him, it is reported as another case of heart failure. There have been reported recently deaths of school children and infants from heart failure so that these deaths make it very hard to come to a satisfactory reason for them. We are very apt to think that many of them are caused by the use of the new drugs, as Phenacetin, Pyrogen, Antifebrin and such like, which have a depressing influence and possibly a weakening influence on the heart and so gradually undermining the life powers that any slightly increased strain upon the system, mental or physical, cannot be sustained, and life stops. I have endeavored to find out under what system of medicine such reported cases have previously been treated but that is not now so easy, but this I know that the reports by homoeopathic physicians of death due to heart failure are very few, and I hope that in the future they may still be less.

But all this does not tell us what heart failure is. I have searched all the books I have, the newest dictionary that is to be had, the *Handbook of Medical Science*, journals and books of many authors of both schools and I have made many inquiries, but cannot find any one who has a definite opinion on the subject. To answer this question it may be necessary to get out of the usual medical road, and when I say that heart failure is a paralysis, I may not be saying much, but nevertheless, it should be said. A paralysis of those nerves which control the heart. What are they? I believe them to be the involuntary nerves, yea, they must be, in order to control this involuntary organ, the heart.

The heart has ceased to beat perceptibly to any known test, and has this occurred many times from water, gas or shock by electricity. Physicians and others have pronounced them dead, and many in this condition have been put on ice, and their death made certain; but in some cases noticed the patient has recovered. The heart has begun its work again. The man who received 4000 volts from an electric motor is alive, though said to have been killed. If such cases have recovered, why may not others? That there is some power in our body which holds the vital power when the heart has failed, I have tried to show, and that this power is, I believe, the sympathetic nerve. The vasomotor nerves which regulate the pressure in the arteries, and, no doubt, exercise a control over the heart itself, are a part of the great sympathetic nerve. When the heart fails it is, in my belief, caused by a paralysis of this nerve in some of its branches, or when death occurs, in its entirety.

The failing heart can be restored by means applied to this controlling nerve. The remedy for this is the poison of the Gila monster, a lizard whose poison differs from that of every known poisonous reptile, in that it is an alkaline poison, and it is said to kill by poisoning the heart.

The history of its destroying powers are not fully or clearly reported, but this poison has been proved, and ought to be reproved by others. That it has a powerful influence upon the heart, I know from personal experience. The peculiar weakness produced by it, a sudden loss of all strength, inability to stand, and such an intense coldness in my heart as if I was being frozen internally. The feeling was in my heart only at first, then hands and feet became like lumps of ice in their coldness, with trembling differing from the trembling of coldness or the chill of ague, but a severe agitation of head and limbs - not all at once, but from the feet up the right

side, then head and left side. The agitation was in jerks and came and went; my mind was very clear, and at first I had no fear - in fact, had none for several days until, by oft recurrence, the pulse came down from 72 to 56 and was jerky; soreness in my heart when the intense arctic feeling had passed away: oppression around and in my heart; stitches or jerks in the heart; tingling and trembling of heart and the intense pain in the head in the region of the atlas, which was the hardest to bear; but the proving has been published, and may be worthy a place in the Institute's minutes.

Heloderma Horridus in Action. - The case of Mrs. F., over 80 years old, who was recovering from erysipelas and dropsy, when she had a fall, and was compelled to take to her bed again. When I arrived, to all appearances she was dying; she could not retain herself in the position in which she was placed; the body slid down. Breathing was very slow, tongue cold and slate-colored, breath cold, body growing cold from the feet upward, a purple hue in her face, hard to get her breath. Temperature 90, pulse 40. I thought she could not live more than two hours. I dissolved a powder of ten globules of Helo. h. 2c. in a glass half full of water, and ordered her tongue to be moistened with it. I did not call again until the next day, when, to my surprise, she was much better, and continued to recover until there was not a trace of sickness left; every organ of the body came back to its normal working. This medicine was the means of lengthening her days.

Another case, aged 65 years, was in the act of dressing herself in the morning, when suddenly her strength left her. Pulse was gone at radial artery and temple, mouth fell open, tongue and breath cold, and to all appearance she was dying, so she thought. The intense pain at the back of the head reminded me of my own experience with Helo. h. I gave a powder of ten globules of 2c. on her tongue. When the counsel I had sent for came, the pulse-rate was 60 and she was feeling warmer and better. She made a good recovery.

Another aged German lady, 82 years, was very low, cold and pulse gone, and with the hue and sweat of death upon her. I did not take the temperature, but at once gave her Helo. h. 2c., and she is now fully recovered.

Several other cases could be given, but these were all extreme cases, and tested the healing powers of the medicine well and satisfactorily. I have the greatest confidence in its healing power over weak or failing hearts. In several cases I have used the 500c. and 2500c., and in one case LM, and all answered very well. It will be found a very useful medicine in many forms of heart difficulties and nervous affections; and in Helo. h. I believe we have a medicine which will act directly upon the great sympathetic nervous system."

(Robert Boocock, M.D., Brooklyn, N.Y., Heloderma Horridus in Heart Failure, Transactions of the fifty-first annual session of the American Institute of Homoeopathy, held at Newport, R. I., June 20 to 26, 1895, p. 399-402)

1899 - Clinical experiences with Heloderma since the proving - Robert Boocock

"Dear Sir: Many thanks for the publication of my proving of Heloderma, with some few additions by Dr. Cameron.

I have been somewhat disappointed in not seeing more made of this powerful medicine, but perhaps the fault is mine in not publishing all that I know of it. I believe it to be the very best thing we have for diseases of the nervous system, and especially for that class under the control of the great sympathetic nerves. It may be demonstrated by this that all nerves are controlled by the great sympathetic. If at any point spirit and matter blend it is just here, but however that may be settled we know that there are parts of our bodily frame that the motor and sensory nerves, which are under the control of the will, cannot touch or control, e. g., the parenchyma of the brain, heart and intestines. Yet we know that these parts are and must of necessity be under the control of some nerves, and subject to changes of our mortality. My

belief is that the great sympathetic is the controlling power. Perhaps as Bichat says, "Life is the sum of the power that resists death." In my hands Heloderma in the 200th, has demonstrated this more than once.

In "heart failure," which I take to be a paralysis of this class of nerves sympathetic, it has brought back many to life. When there has been evidence of the heart ceasing to act, no pulse perceptible, breathing cold and almost gone, I have in three cases seen them brought back to life by moistening the tongue with a little water in which a small powder of the 200th was dissolved. One described it as if he had gone away and were brought back from a distance to recognize sounds and words.

Three cases of paralysis with loss of sensation for a year, hands blue and cold on the hottest day of summer, have been cured by Heloderma 2 c.

A case of progressive locomotor ataxia was arrested after eighteen years' paralysis, and a partial recovery ensued.

A beginning paralysis of the facial muscles was promptly cured by one dose of the c.m., 4 globules.

I think it would be well if you refer to this proving again to mention that all the reptile poisons, so far as known, are acid poisons, with the exception of the Gila monster, the poison of which is alkaline. When I first experienced the poisonous effects I wrote to Dr. T. F. Allen to let me know what remedy to take as an antidote, and the answer came back that there was no antidote known. After eating freely of pickles and taking vinegar I was led to believe that I had found an antidote to the poison of the Gila monster, and I think the credit of this belongs to me."

Very truly yours,

Robert Boocock.

(Heloderma horridum, Letter from Robert Boocock to James T. Kent, The Journal of Homoeopathics vol. 2 (1899), p. 33-34)

Leitsymptome und Charakteristika / Keynotes and Characteristics



Heloderma horridum

Leitsymptome und Charakteristika / Keynotes and Characteristics

Übersicht / Overview

1900 - John H. Clarke
1927 - William Boericke
1929 - N. M. Choudhuri

1900 - John H. Clarke

“**Clinical.** - Brain, base of, affected. - Cerebro-spinal meningitis. - Coldness. - Headache. - Heart failure. - Locomotor ataxy. - Neuralgia. - Numbness. - Paralysis. - Paralysis agitans.

Characteristics. - The information we possess of the action of *Heloderma* is contained in vols. v. to xi. of *Hom. Recorder*, including some remarkable and important provings by Dr. R. Boocock. The name given to this remedy by the *Recorder* is *Heloderma horridum*, but as there is no little confusion between two species, I prefer to name the remedy *Heloderma* simply.

The first notice of the remedy is in vol. v. p. 163, in letters from Dr. Charles D. Belden, who supplied Messrs. Boericke and Tafel with a living specimen and also poison obtained by himself. Dr. Belden calls his specimens "*H. horridum or Suspectum*." Now Dr. Belden writes from Arizona, and the river Gila (pronounced "Hee-la") from which the lizard takes its name "Gila Monster" is an Arizona river, and the Arizona lizard is *Heloderma suspectum*. *Heloderma horridum*, the "Crust lizard," which is also called "Gila monster," is a Mexican lizard and is generally regarded as harmless. At any rate it is agreed that there is one lizard that is poisonous, and that lizard is a *Heloderma*, and our remedy is the poison obtained therefrom. "An ugly, disagreeable-looking creature, the head long and blunt, eyes black and bead-like, tail half the length of the body, thick-set and club-like. The entire body cased in a thinly coated armour, marked curiously with yellow and black." It is sluggish and slow of movement when kept in the dark, but may develop great activity when brought into the sunlight. It is most tenacious of life, the only vulnerable part seems to be at the junction of the head with the spine, a blow on which will kill it. Of the bite of the reptile Belden says : "This animal does not bite frequently, but when it does it is understood that the result is a benumbing paralysis, like that of *paralysis agitans*, or to *locomotor ataxy*. There is no tetanic phase." The venom is alkaline in reaction.

Numbers of cases of bites are on record. A dog bitten in the nose "uttered fearful howls, and when, after great difficulty, he was released, had symptoms like 'blind staggers,' began turning around in a circle, and died in twenty minutes." A young miner bitten in the leg, though in robust health at the time, at once began to lose flesh, became melancholy, and died in a few months like one in rapid consumption. *Helod.* has the reputation of being fatal to drinkers, and to affect the temperate less severely. This, says Belden, is borne out somewhat by the recovery of Mr. Vail, of Tucson, a man of temperate habits, after a bite, and the death, after lingering several months, of a man bitten whilst drunk. This lingering nature of the action of the poison is markedly different from the snake poisons, which generally kill quickly if at all. An Indian woman bitten in the leg, survived, but the leg shriveled, and she became a semi-idiot, though she lived over thirty years after.

The writer of an article quoted by the *Recorder* from the *New York Sun*, relating her case, thus describes the effect : Where the person survives an hour or two after the bite, the agony is

described as awful to witness. The poison goes through the human system with lightning rapidity, and causes unspeakable pain and excruciating agony from head to foot. Though paralysed, every muscle, bone, sinew, and nerve is keenly alive to intense pain. The sufferer's head seems as if it would split open. Very few persons bitten can speak after the first fifteen minutes, but unconsciousness seldom comes until a few minutes before death. Mr. Vail says his suffering was intense, the pain proceeding from the wounded part to the head and back. Immediately after receiving the wound, which was on his index finger, both wrist and finger were tightly bandaged. Two hours later the wound was cleansed and dressed and the bandages reapplied. For three days those intense pains would shoot towards the head and spine on loosening the bandages in the least degree. After three months the only perceptible result was a swollen tongue which seemed then unwilling to resume its proper size. The treatment he received was profuse sweating by administration of Jaborandi. Experiments on animals seemed to show that death occurred rather from heart failure than from respiratory failure.

This much was known when Dr. Robert Boocock, of Flatbush, made his proving which has given the remedy a definite place in the homoeopathic materia medica. The first experience was with a solution of the 6x trituration, one drachm in four ounces of alcohol. Of this he took three or four drops. He was seized with an internal coldness from the heart as if being frozen to death internally and had no way of warming himself. "Coldness from within outward." The coldness of this remedy is more intense than that of any other. "Arctic coldness," the prover called it. The coldness was at times followed by sensations of heat and burning. Dr. Boocock's observation of the cold sensations of *Helod.* was confirmed by a young clerk in the employment of Messrs. Boericke and Tafel, who took six doses of *Helod.* 6 out of bravado. The second night he awoke, and the impression that he was under the influence of *Helod.* flashed on his mind. He felt a cold sensation creeping down his body and legs, and was in a very cold clammy sweat. This lasted all the rest of the night and he could get no more sleep. It began to pass off by morning, and he felt no more of it.

The constricting sensations of the serpent venoms were produced by *Helod.*, also the numbness and darting pains and the sensitiveness to external pressure. Many of the symptoms came on in the night waking the prover from sleep (like the "< from sleep" of Laches.). The tremors, spongy feeling of feet on walking, pains in back and limbs, bear out Belden's commendation of *Helod.* in locomotor ataxy and paralysis agitans.

Dr. Boocock gave great relief with the medicine in a case of the latter; and E. E. Case effected great improvement in a case of locomotor ataxy in an auburn-haired woman, 55. She had the classical symptoms of the complaint and "tingling, creeping sensations in legs as if from insects, was < lying in bed at night; < from exposure; from touch. Arms numb. Legs insensible to battery. Tongue dry and cracked. Swallowing difficult." Under *Helod.* 900, and later, 45m, after the appearance of an eruption, she recovered a fair degree of health and usefulness.

C. E. Johnson reported to Dr. Boocock (H. R., ix. 141) the relief of a woman who had many of the symptoms of the proving (and had been pronounced incurable), complaining especially of the intense coldness. She received *Helod.* 200, and the coldness disappeared almost completely. Boocock cured a case of "blue hands," remaining long after diphtheritic paralysis; and he restored two patients apparently moribund. In one case the breathing was slow, "tongue cold and slate-coloured, breath cold." The other case was that of a woman, 65.

In the act of dressing, strength suddenly left her, mouth fell open, tongue and breath cold, and she was apparently dying and felt so. There was intense pain at the back of the head." *Helod.* 200 was given, as in the other case, and she made a good recovery.

The weakness Dr. Boocock experienced in the proving he compared to that of Gels., only Gels. did not dry up the mouth and secretions as *Helod.* did. The modalities noted were < from cold with desire for warmth. < After sleep; at night. > From stretching.

Relations. - *Compare:* Lach., Crotal, &c.; Camph. (coldness); Arg. n., Alumina (locomotor ataxy); Ant. t. and Merc. (paralysis agitans); Gels., Con., Hydrophobinum.”

(John Henry Clarke, M.D., A Dictionary of Practical Materia Medica, vol. 1 (1900, Heloderma, p. 885-888)

1927 - William Boericke

“The result of the bite is a benumbing paralysis like paralysis agitans or locomotor ataxia. There is no tetanic phase - a condition almost reverse in objective symptoms to Hydrocyanic acid or Strychnia. The most unusual action of the drug is noted upon the eye of the mouse. *The eyeball becomes more prominent* and the cornea shows opacities. The exophthalmus is due to the pressure of the blood behind the eyeball (Boyd). Homoeopathically, it is indicated in many forms of disease characterized by *great coldness* - "arctic" coldness. Colic waves from occiput to feet or ascending.

Head. - Very depressed. Sensation as if would fall to right side. *Cold* band around head; cold pressure within the skull. Eyelids heavy. Pain beginning in right ear, extending round back of head to left ear.

Face. - Cold crawling feeling, as if facial muscles were tight.

Mouth. - Tongue cold, tender, and dry. Very thirsty. Swallowing difficult. Breath cold.

Chest. - Cold feeling in lungs and in heart. Slow labored thumping of heart.

Back. - Coldness across scapulae. Burning along spine.

Extremities. - Numbness and trembling. Cyanosis of hands. Coldness. Sensation as if walking on sponge, and as if feet were swollen. Staggering gait. Cock's gait. When walking, lifts feet higher than usual, and puts down heel hard. Feet cold as ice or burn. Stretching relieves pains in muscles and limbs.

Fever. - *Internal coldness*, as if frozen to death. Cold rings around body. Cold waves. [*Abies c.*; *Acon.*] *Cold spots*. Arctic coldness. Temperature subnormal - 96 [*Camph.*]

Relationship. - *Compare:* *Lacerta* - Green Lizard (skin eruptions. Vesicles under tongue. Increased mental acumen. Difficult swallowing. Constant accumulation of saliva in the mouth. *Nausea*; violent pressure in stomach). *Camphor*; *Lachesis*.”

(William Boericke, M.D., Pocket Manual of Homoeopathic Materia Medica, Ninth Edition, New York 1927, Heloderma, 9. 322-323)

1929 - N. M. Choudhuri

Notes

- Sensation of “arctic coldness” everywhere.
- Sensation of constriction.
- Aggravation from sleep.

This is a medicine of recent origin and is prepared by triturating sugar of milk saturated with the venom of Gila Monster, a serpent of the lizard type found in Arizona. It is an ugly looking object, the entire body being encased in a thinly coated armour of fixed skin, marked over with yellow and black spots. In dark, it becomes excessively languid and slow in movement, but assumes great activity and liveliness when brought in the reviving rays of sunlight. This is true mostly of every species in the hotter part of the season and go comparatively low during the cold months of winter and snow. Its bite produces symptoms of locomotor ataxia and

paralysis agitans. The poison is a slow lingering poison and when it does kill, it kills after months of suffering, pain and torture. Death takes place from heart failure than from respiratory failure.

Dr. Robert Boocock made bold painful of this remedy and brought it to a scientific basis. He took 3 or 4 drops of tincture prepared by mixing one dram of 6x trituration to 4 ounces of alcohol. He was seized with an internal coldness in the region of the hours as if being frozen to death. It was a coldness that came from within outward and was so intense as to be described as an "arctic coldness". Other provings had this symptom just as prominently as Dr, Boocock. Hence we can consider this symptom to be the cardinal symptom of the remedy.

It also has a sensation of constriction and aggravation from sleep as in other snake remedies. Other indications are tremor, spongy feeling of feet on walking, numbness, staggering gait and thirst with dryness of the mouth.

The sensation of coldness, referred to above, is felt everywhere. In the head we have a sensation of a cold hand. In the mouth, the tongue feels cold, dry and tender. In the chest, even the lungs and the heart feel cold. Coldness is felt along the scapula and spine.

On these indications, Dr. E. E. Case effected a great improvement in a case of locomotor ataxia in a woman who had all the classical symptoms of the disease. Under the application of Heloderma she recovered a fair control of her muscles and usefulness. Dr. Boocock used it successfully in a case of impending failure of the heart with all the symptoms of death gradually making their appearance, such as blueness of the hands, coldness of the tongue and breath, and sudden loss of strength and energy.

In fever we have excessive internal coldness and sensation of cold waves ascending from feet or going down from the base of the brain. Heloderma thus becomes akin to *Abies canadensis* and *Camphora* in the treatment of marsh fevers."

(N. M. Choudhuri, M.D., A Study on Materia Medica, Second Edition 1929, Heloderma, p. 474-475)

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[Boocock proved *Heloderma suspectum*!! Our knowledge of *Heloderma* is therefore related to this species of *Heloderma*!!]

- Letter from Chas. E. Johnson to Robert Boocock, *The Homoeopathic Recorder* vol. 9 (1894), p. 141

[Experience with *Heloderma* in a case "pronounced incurable", "where the patient has most of the symptoms of the proving developed. That awful coldness being most pronounced. She has had two doses of the 200th. She is delighted with the result. The coldness has nearly disappeared, leaving a comfortable glow upon the body."]

- Samuel Lilienthal, *Heloderma*, *The Homoeopathic Recorder* vol. 9 (1894), p. 494-498
[Symptom-Register of the provings of Robert Boocock 1893. - Compare Cameron 1898]

- *The Homoeopathic Recorder* vol. 9 (1894), p. 506

[Accidental proving by a clerk in the employ of Boericke & Tafel. - Clinical hints.]

- Letter from Robert Boocock, *The Homoeopathic Recorder* vol. 9 (1894), p. 550-551

["As I think I may safely call it my own discovery, I am anxious to look after it somewhat. I am a poor man, and perhaps it is only through something like this that I may be able to make my mark on the generation in which I have lived, and so, perhaps, perpetuate my name. I have some ambition in this direction." - "Now I have a story to tell of this powerful medicine that will astonish the medical world, but one case may not be enough; and yet in a limited practice one case of arrested heart failure and recovery from paralysis of the lungs may be worth repeating and heeding, but I want more chances and a higher dilution to work with. I have one case of paralysis agitans complicated with other troubles that has run the gauntlet of many physicians, one of the worst cases to hope anything from, and yet I am doing good." - "If king and queen of the world could offer millions for a moment of time, then I have in this a means of arresting death on its flight in heart failure and paralysis of the lungs. What else will come from it God only knows."]

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[Vf. berichtet über seine Erfahrungen mit *Heloderma* bei 14 Patienten. Meist waren es Patienten, die im Verlauf der Behandlung mehrere Arzneien erhielten; *Heloderma* zeigte jedoch in allen Fällen eine deutlich heilende Wirkung, wenn auch oft nur für einen Teil der Symptomatik. - Vf. schreibt abschließend: "An Hand einer Kasuistik von 14 Fällen läßt sich ein in der Arzneimittelprüfung bisher nicht verifiziertes, jedoch meines Erachtens wesentliches Indiz für den Gebrauch von *Heloderma suspectum* herausstellen: das anamnestiche oder klinische Vorliegen einer latenten Allergie (im speziellen Sinne). Seine Kenntnis erleichtert die Differentialdiagnose gegenüber konkurrierenden Arzneimittelbildern, zum Beispiel von *Elaps* und *Prionourus (Buthus) australis* usw. An Hand der Tabelle läßt sich eine bemerkenswerte *Linkslateralität* von *Heloderma* aufzeigen."]

•• Hugbald Volker Müller, Osteomyelitis beider Unterschenkel, *Documenta Homoeopathica* Bd. 18 (1998), S. 191-201

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••• Todd Rowe, A Proving of *Heloderma suspectum* 2002