For Alfred Perkins Esqr.
From the Author.

DR. MOSELEY

ON

HYDROPHOBIA.

ON HYDROPHOBIA,

ITS

PREVENTION,

AND

CURE.

WITH A

DESCRIPTION OF THE DIFFERENT STAGES

OF

CANINE MADNESS:

ILLUSTRATED WITH CASES.

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ON HYDROPHOBIA.

THE Epidemical rage of Canine Madneſs in England for two years paſt;—its preſent prevalence,—and fatal effects experienced of late by the human race, induced me to give as much publicity as poſſible, to the three following Eſſays. The *Morning Herald* was the vehicle I ſelected for the purpoſe.

The demand for that popular Daily Newſpaper, containing theſe Eſſays, was great; and the numbers printed, though great, were inadequate to the demand. Many hundreds of people, who wiſhed to obtain an impreſſion of one, or more of them, were diſappointed.

On this account I have been ſolicited to reprint theſe detached Eſſays; and to publiſh them all together.

This muſt be my apology for the method in which they make their appearance.—But the exigency of circumſtances may alſo plead in

my favour. Acts devoted to public good, in times of danger, rise above all forms; and are paramount to all personal considerations.

The two Cases of Hydrophobia will, in many minds, occasion the deepest reflection.

It may seem incredible to some people, that there has never been an accurate description of Hydrophobia, and a succession of the symptoms of Canine Madness, before given to the world.

It does not appear satisfactorily, to the learned, that any writer on this malady ever saw its whole train of evils. The ancients, like the moderns, describe, and prescribe, in their way; but not one among them even pretends to have seen Hydrophobia, with Rabies in all its stages.

Some of the moderns assert, they have witnessed the dreadful scene; but their own evidence is against them. BOERHAAVE is bad; MEAD worse; and the rest, with very few exceptions, are contemptible.

It has been a theme for theoretic Physicians; a metaphor for Poets; and a fable for Historians.

There can be no doubt that many people have seen the disease; because many have perished by it. But it may be asked, what are these Spectators' descriptions, and their details of practice?

Hydrophobia, from the bite of a Mad Dog, has ever been deemed incurable.

OVID

OVID remarks, that Hydrophobia and Gout, are not within the reach of medicine*.

CELSUS considers Hydrophobia as an hopeless misery†. The only remedy, he says, is plunging the patient unawares, into a cold bath; and there half drowning him. I believe CELSUS, who first mentions this process, never tried it. He knew, and mentions, the dangers of it. Yet this has given rise to all the erroneous notions, concerning cold bathing, as a *preventive* of Hydrophobia.

SCRIBONIUS LARGUS is of opinion, that no person was ever relieved from it ‡.

PLINY asserts, that (before his old woman's dream that her son was to be cured of the bite of a Mad Dog, by the root of the *Dog Rose)* no person was ever cured of Hydrophobia §.

ORIBASIUS ||, and PAUL ÆGINETA ¶ maintain, that it is a mortal disease.

* Tollere nodosam nescit medicina podagram,
Nec formidatis auxiliatur aquis.
Ep. ex Ponto, lib. i. ep iii. 23. 24.

† Miserrimum genus morbi; in quo simul æger et siti et aquæ metu cruciatur. Quo oppressis, in angusto spes est. Lib. v. c. 27.

‡ Nemo adhuc, correptum hoc malo expeditus est. *De Comp. Med.* lib. c. xlv.

§ Insanabilis ad hosce annos fuit Rabidi Canis morsus, pavorem aquæ, potûsque omnis afferens odium. *Nat. Hist.* lib. xxv. c. 2.

|| Ex iis verò qui a Cane Rabioso morsi fuissent, servatum esse neminem. *Synop.* lib. viii. c. 13.

¶ Cæterum eorum qui in hanc affectionem inciderunt, nullum sanatum esse. *De Re Med.* lib. v. c. 3.

ORIBASIUS (from APPOLLONIUS PERGAMENUS,) PAUL ÆGINETA, and many others, mention Hydrophobia, or an horror at the ſight of water, from other cauſes; but as a curable, and ſimply nervous affection:—which we all know it is. Some modern authors ſpeak of its appearance in fevers that have been fatal. CÆLIUS AURELIANUS makes mention of ſpontaneous Hydrophobia *. This alſo is an old ſtory in phyſic.

Some writers fancy they can retrace Canine Madneſs to HIPPOCRATES; and ſome even to HOMER. CÆLIUS AURELIANUS, who complains that the ancients knew no cure for Hydrophobia, among others, was of this opinion †. But not one word either in HOMER, or in HIPPOCRATES, I am certain, will be found to juſtify them.

The epithets given to Hector, in HOMER, which have puzzled, and miſled conjecturers, mean nothing more than that his violence reſembled inſanity ‡; and his fury rendered him like an enraged Dog §. As to HIPPOCRATES, he only ſays that phrenitic patients, drink-

* Eſt præterea poſſibile, ſine manifeſtâ cauſâ, hanc paſſionem corporibus innaſci. *Acut. Morb.* lib. iii. c. ix.

† *Acut. Morb.* lib. iii. c. 15. & c. 16.

‡ Κρατερη δε ἑ λυσσα δεδυκεν. *Il.* ix. 239. Ὁ λυσσωδης, *Il.* xiii. 53 Λυσσα δε οἱ κηρ. *Il.* xxi. 542.

§ Κυνα λυσσητηρα. *Il.* viii. 299.

ing

ing but little, are affected by any ſmall noiſe, and are ſubject to tremors, — or convulſions *.

ARISTOTLE, who lived nearly a century after HIPPOCRATES, and more than ſix centuries after HOMER, is the firſt who mentions the Rabies in Dogs. But in ſuch a way, as to prove, that the diſeaſe was not underſtood in his time; or that it was a different kind of Rabies, from that in our days,—if there have been no corruption in the text. For he remarks, that the human race was not affected by it †.

He ſays—" Dogs are ſubject to three diſeaſes; —the Rabies; the Angina; and the Podagra. The Rabies cauſes madneſs in Dogs; and all animals they then bite have the Rabies, excepting Man. This diſeaſe kills Dogs, and all that are bitten, excepting Man ‡.

The cauſe of this ſurpriſing diſeaſe in the Canine ſpecies, is not better underſtood, after a lapſe of more than two thouſand years, than its Nature, and treatment are, when commu-

* Οι φρενιτικοι βραχυποται ψοφου καθαπτομενοι, τρομωδεες,—ῆ σπασμωδεες. *Prædict.* lib. i. 16. & *Coac. Prænot.* 98.

† Πλην ανθρωπου.

‡ Οι δε κυνες, καμνουσι νοσημασι τρισιν. ονομαζεται δε ταυτα, λυτλα, κυναλχη, ποδαγρα. Τουτων ἡ λυτλα, εμποιει μανιαν· και οταν δακη, λυτλωσιν απαντα τα δηχθεντα, πλην ανθρωπου. αναιρει δε το νοσημα τουτο τας τε κυνας και ὁ, τι αν δηχθῃ υπο λυτλωσης, πλην ανθρωπου. *Hist. Animal.* lib. viii. c. 22.

nicated from the original ſource, to the human frame.

Almoſt all writers conſider madneſs in Dogs, to ariſe from thirſt; or from the heat of Summer, particularly during the Dog Days. Ignorant people ſuppoſe it never happens without infection, from one animal to another; by bite, or otherwiſe.

ÆTIUS is of opinion, that Dogs are moſt ſubject to it, in thoſe countries, where there are the greateſt changes and inequalities of the atmoſphere;—where the cold in winter is extreme; and the heat in ſummer exceſſive *.

VIRGIL, though not a phyſician, ſpeaks more like a philoſopher, and comes nearer the mark, than any phyſician who has hitherto written expreſsly on the ſubject. He claſſes Canine Madneſs among the diſtempers of ſheep, and cattle; brought on by a peſtilential ſtate of the air †. VIRGIL's inſtance indeed is ſtated from a particular plague; which, during the raging heat in Autumn, contaminated the waters, poiſoned the paſtures, and almoſt exterminated every kind of animal.

A general hiſtory of Canine Madneſs does not come within my preſent view. Such an hiſtory is much wanted; as improvement in the

* *Tetr.* ii. *Serm.* 2. c. 24.

† Hinc Canibus blandis Rabies venit. *Georg.* lib. iii. 496.

treatment

treatment of this greateſt of all human miſeries, can never take place, until the medical ſuperſtition and ignorance, with which it is involved, ſhall be properly expoſed; ſome hope eſtabliſhed; and all reliance on noſtrums and pretended cures totally deſtroyed *.

The wretched in this diſeaſe,—are wretched indeed. Conſigned, by cuſtom, to a refuge where they are deceived, robbed and murdered.

Another misfortune to humanity is, that ſince the ſeparation of Phyſick and Surgery into diſtinct profeſſions, every Phyſician, and every Surgeon, are not qualified to undertake complicated Caſes,—ſuch as wounds from rabid, and venomous animals, with their conſequent diſeaſes.

* Aſhes of burnt River Crabs was a great remedy with the Ancients for the bites of Mad Dogs. GALEN wonderfully extols their virtues. The following he ſays is infallible: Take—Frankincenſe * 1 part; Gentian Root 5 parts; and burnt River Crabs 10 parts; all made into a powder. The doſe is a table ſpoonful; to be given once a day, for forty days. *De Simp. Med. Fac.* lib. ii. Περι καρκινων κεχαυμενων.

Another celebrated Antidote, was that of APULEUS CELSUS; prepared of Peppers, Aromatics, Gums, and Opium. It is deſcribed by SCRIBONIUS LARGUS, *De Comp. Med. Lib.* cap. xliii.

Theſe two compoſitions, with different Boles or Earths, ſubſtituted for the calcined River Crabs, are the baſes of all the formulæ, ſince the times of their reſpective authors.

* Λιβανωτος.

A Surgeon now, is ſuppoſed to know as little of phyſic as poſſible; and a Phyſician is ſuppoſed to underſtand about as much ſurgery. What then muſt be the fate of a Patient, in the hands of either, who requires the utmoſt aid of both?

Hence it is, that the knowledge of Hydrophobia, and the treatment of the bites of Mad Dogs, in particular, have not advanced with other improvements in medicine. They are as ill underſtood, as they were in the time of CELSUS; nay worſe; becauſe CELSUS was as renowned in Surgery, as in Phyſick:—and his method is not without great deſign in both.

Many phyſicians of long ſtanding, and of great learning and experience, have never ſeen Hydrophobia; and many believe it never exiſted.

In the following pages will be found a faithful deſcription of all the general ſymptoms of Canine Madneſs, in the human frame; with a new, plain, and correct ſtatement of the different ſtages of the diſeaſe; and an inſtance of ſucceſsful treatment of Hydrophobia. The two Caſes, illuſtrating theſe facts, were ſeen by many people.

The ſubjects of theſe Caſes, are not the only patients I have had under my care for the bites of Mad Dogs, within the laſt few months. I wiſh they were. It is well known I have had

many;

many; and have cured them. That is, the Hydrophobia has been prevented; and by the methods chiefly explained—circumſtances and conſtitutions varying—in the following Papers. —I have now ſeveral under my care.

Here I obſerve, that every perſon, or animal, bitten by a Mad Dog, is not always ſuſceptible of the infection. It is the ſame in reſpect to Small Pox virus. The habit may be in a ſtate not to receive it I have known men, cats, dogs, hogs, and ſheep, bitten by Mad Dogs, where no remedies whatever have been uſed, remain perfectly well; when perſons and animals, bitten at the ſame time, by the ſame Dogs, have died mad.

This practical fact, denounces the dangerous opinion, that Dogs are often ſuppoſed to be mad, when they are not. This accounts alſo, for the credit, which the moſt abſurd compoſitions have acquired for curing the infection of Canine Madneſs, where it never exiſted.

With theſe preliminary obſervations, and without comment, the following Eſſays are again offered to the Public;—the laſt with ſome important additions.

CASE

CASE I.

ON Monday afternoon, at three o'clock, the 9th of November, 1807, Mrs. METCALFE, No. 25, Compton-ſtreet, brought her ſon, Mr. FREDERIC MICHAEL METCALFE, to me for advice, at my houſe in Albany, Piccadilly.

He informed me, that he was attacked about four o'clock the preceding morning with a difficulty in ſwallowing any liquid, which he firſt perceived when he attempted to drink ſome porter, the remains of half a pint, which he had on Saturday evening.

He ſaid, when he put the pot to his mouth, ſomething roſe in his throat, and choked him. He ſwallowed, as he thought, about a tea-ſpoonful, and then was ſeized with a trembling, and cramp in his arms and legs, and a ſenſation of pricking, as if pins or needles were run into his fleſh.

His appetite failed him on Saturday. On Sunday he ate a ſmall piece of mutton, which made him ſick at his ſtomach. He had eaten nothing on Monday, the day he came to me; though he ſaid he could ſwallow any thing, except it were in a liquid form; but had no deſire for food.

He

He ſaid he was attacked on Thurſday laſt with a violent pain in his right arm, from his ſhoulder to the ends of his fingers. This pain left him on Saturday night. He rubbed the arm with hartſhorn and oil, and wrapped it up with flannel, on Saturday.

Mrs. METCALFE informed me, that on his ſeeing any liquid poured out for him to drink, even before he took hold of the pot, or cup, he began to tremble, and the choking ſeized him. She ſaid, in attempting to drink, he became convulſed, his eyes looked glaſſy, and he ſtared in an unuſual and frightful manner.

The CASE thus clearly demonſtrated, I deſired Mrs. METCALFE to go with me into another room. I did this that I might not alarm her ſon, by queſtions neceſſary for further information.

Neither Mrs. METCALFE nor her ſon had the ſlighteſt ſuſpicion of the cauſe, or the nature, of this dreadful calamity.

I aſked Mrs. METCALFE whether her ſon had been lately bitten by any Dog? The very queſtion ſo much alarmed her, that ſhe was for a few minutes in a ſtate of diſtraction. When ſhe was able to ſpeak, ſhe exclaimed, with a loud ſhriek, that he had been bitten in the hand by a Dog in the ſummer. As ſoon as ſhe became calm and compoſed, we returned to her ſon.

On

On interrogating him, he informed me, that in the beginning of July laſt, there were two Dogs fighting deſperately in the ſtreet oppoſite his mother's houſe; and he obſerving one of them had one of his eyes torn out, and the other Dog likely to kill him, endeavoured to part them; but on taking hold of the Dog he wiſhed to reſcue from the fury of the other, he received a bite from him on his right hand.

Two of the Dog's teeth penetrated the outſide of the hand, but the palm of the hand was conſiderably wounded. This wound was dreſſed with Friar's balſam, and poulticed, and was cured in a week or ten days.

I examined his hand.—There was a ſmall degree of redneſs remaining, but no heat, or pain, where the wound had been in the palm of his hand; and no veſtige whatever on the outſide where the teeth had been.

There was nothing obſervable in his throat, differing from its natural ſtate; nor any increaſe of ſaliva.

Pulſe 88, rather feeble, and not quite regular. He had no thirſt.

He told me his choking ſeemed to him as ariſing from wind; and that he always diſcharged a great deal from his throat, whenever he attempted to ſwallow.

He ſaid he took ſome Dill-ſeed water the

night

night before he came to me, and thought it relieved him; but never could get down more than a tea-ſpoon-ful at a time, and that with great difficulty. In one attempt to ſwallow ſome of this water, he was ſo choked and convulſed, that he would have fallen into the fire, his mother told me, if ſhe had not ſaved him.

I gave him ſome water in a pint-pot twice; each time he ſwallowed about a tea-ſpoon-ful, and both times was choked, and convulſed, with a wild ſtaring in his eyes, and a trembling all over him; and immediately after the effort of ſwallowing, he made an hideous noiſe.

The ſecond time I gave him the water, I was much alarmed; I thought it would have occaſioned a fatal convulſion.

It is impoſſible to deſcribe a ſound; and I can compare the noiſe he made, which was from repeated ſpaſmodic contractions of the organs of reſpiration, to nothing but to that ſort of ſtifled barking which Dogs ſometimes make, when diſturbed in their ſleep; or to the hoarſe, ſhort barking of a Drover's Dog.

When he took the pot in his hand, he fell into a tremor, held down his head, and was in great diſtreſs; he kept it in his hand a few ſeconds before he could ſummon courage to lift it to his mouth; after which I took it from him, as from his agony he could not hold it.

He

He bore the ſight of the water in the pot, while it was in my hand, when it was not offered him to drink; but when I brought a large baſin filled with water, and put it before his eyes, he ſeemed frightened; and when I agitated the water near him, he was inſtantly attacked with what he called "*the wind riſing in his throat*," trembling, and that hoarſe, faucial noiſe before-mentioned.

He entreated me not to order any medicine for him in a liquid form, as he ſaid he could not take it; and the attempt, he was certain, would kill him.

He ſaid he could ſwallow any ſolid ſubſtance. I put this to the proof; and, as he had been coſtive for ſeveral days, I gave him four aperient pills, which he ſwallowed one at a time, but with ſome difficulty.

He had now been with me three quarters of an hour, when he and Mrs. METCALFE left Albany, with the beſt advice I could give, and walked back to Compton-ſtreet.

From his appearance, and converſation, no perſon would have thought there was any indiſpoſition about him. His voice, and ſpeech, had ſuffered no alteration. He was in the eighteenth year of his age; a very fine youth in mind, as well as in perſon.

His humanity here was his misfortune.

With what grief did I ſee him depart from

Albany

Albany with his poor mother, knowing, as I did, that he had but a few hours to live!

I viſited him in the evening. Pulſe 110, and very feeble. I gave him ſome barley water. In attempting to drink, the uſual conſequences,—choking, wildneſs in the eyes, and the noiſe in the throat, followed.

The pills operated about nine o'clock, ſeveral times.

About ten o'clock he became ſo violently convulſed, that four young men, his brothers, could ſcarcely keep him in his bed; but he made no attempt to bite any perſon. He began alſo to ſpit, and foam at the mouth, with white froth. The quantity of this froth was ſo great, as to require many towels and handkerchiefs, in wiping it from his mouth.

At this period he likewiſe became delirious at intervals, but at times was in his perfect ſenſes; and complained, though in a very warm room, of being cold, and begged to be kept warm.

In this condition he continued until one o'clock on the following morning; when, from his violent convulſive exertions and ſtruggling, he was entirely exhauſted, and remained calm and quiet afterwards.

He expired at a quarter before two; eighteen weeks from the time of the accident; forty-ſix hours from the commencement of the HYDROPHOBIA; and ten hours after I firſt ſaw him.

CASE

CASE II.

SUCCESSFULLY TREATED.

Mrs. HANNAH LACASE, aged 30 years, No. 32, Rupert-ſtreet, came to me at Albany, in the afternoon of the 15th of December 1807, for advice, having been bitten by a Mad Dog. She informed me that—

On Tueſday evening, the 1ſt of December, ſhe ſaw a little Dog on opening the ſtreet-door, at the threſhold, trembling, as if ſuffering from cold. She let him into the houſe, and put ſome bread and milk before him, of which, ſhe thinks, he ate a little.

On Wedneſday, the 2d, he took no notice of food, and ſeemed ſtupid; and ſlept all day under the tables and chairs.—One of his eyes appeared blind. He had a running at his noſe, and was paralytic in his loins, and dragged his hind-legs after him. She carried him into her room, when ſhe went to bed. About midnight ſhe heard him tumbling on the floor; and he continued in that diſturbed ſtate until morning.

On Thurſday, the 3d, ſhe roſe early; and while ſhe was lighting the fire, the Dog ran at her, and ſnapped at her right leg, and tore the ſtocking. In putting him away with her right hand,

hand, he ſeized her little finger in his mouth, and made two ſmall punctures near the end of it, with his teeth. He died an hour afterwards.

The punctures, though ſmall, muſt have been deep, or the poiſon greatly virulent; as ſhe ſaid, the pain in the finger, for two hours, was exceſſive. When the ſeverity of the pain abated, a ſenſation came on, like the pricking of pins; which continued for about a quarter of an hour, and then ceaſed.

On Friday, the 4th, the pain returned in the finger, and continued for about an hour. After an interval of three days, it returned again, and remained for a little time.

On Friday and Saturday, the 11th and 12th, ſhe was attacked with a numbneſs in the finger and hand; with ſome pain, which advanced to the elbow. The numbneſs and pain went off in about ten minutes, each time.

In the courſe of her ſufferings, ſhe went to a very reſpectable Surgeon, who propoſed to have the bitten part removed; but ſhe objected to it.

On Tueſday, the 15th, being very ill, ſhe came to me. The numbneſs and pain, which ſhe experienced on Friday and Saturday, returned this morning. Her whole hand was ſuddenly affected, while ſhe was blowing the fire, and the uſe of it almoſt entirely taken

 away.

away. The bitten finger became livid, but the lividneſs diſappeared in an hour or two.

When ſhe came to me, her hand was quite ſtiff; the finger was hot, and in much pain. She was in great perturbation of mind and body. Her eyes were glaſſy and inflamed. She ſighed almoſt continually. Her whole nervous ſyſtem was extremely affected. Pulſe 120, weak, and irregular. No thirſt. Nothing remarkable in the throat. She ſaid her dreams, for ſeveral nights before, were ſhocking; that on the preceding night ſhe could not remain in bed; but got up, put on her clothes, and went down ſtairs, fancying the houſe on fire: and that her head was diſtracted with a noiſe, which ſeemed to her like the rattling of coaches.

I offered her ſome water; but could not prevail on her to attempt to drink it. She ſaid ſhe could not; and was ſeized with a trembling. She had no difficulty in ſwallowing any liquid, notwithſtanding, as was afterwards proved. I then brought a pewter baſin filled with water, and ſlopped it about before her; but on much agitating the water, and pouring it out of the baſin into a pewter pot, and from thence back to the baſin a few times, ſhe looked at it with horror, and was ſo diſtreſſed, without having any idea of my motives, that ſhe begged I would take it away, or that ſhe could not ſtay in the room.

When

When appeaſed by the removal of the water, after this experiment, ſhe told me, that in the morning, as ſhe was drawing ſome water from the ciſtern in the yard, ſhe was ſeized with a trembling, giddineſs of the head, and terror, at the ſight and noiſe of the water running into the pail. She was ignorant of the cauſe.

I knew from woful experience, what miſchief was at hand. But knowledge without promptitude, like promptitude without knowledge, here, is of no avail.

I deſired her to go immediately home, and to go to bed.

I ſhould have had doubts of the utility of applying my uſual cauſtics, *Butter of Antimony*, and *Lapis Infernalis* (the cure in recent caſes), to the bitten parts, which were healed in three days after the accident, and had now no other viſible remains, than two ſmall indentations of the ſkin—but that the ſtate of the finger and hand ſhewed the virus was ſtill active in the parts adjacent to the original wounds. Therefore I removed the ſkin where the wounds had been; and inſtituted a drain, which was continued through the whole proceſs of treatment.

At five o'clock in the afternoon, I had an ounce of *Unguentum Mercuriale fortius* well rubbed in by herſelf, about her neck, throat, thighs, and legs. I then gave her the following

draught, with directions to promote perſpiration every way poſſible.

℞. *Julep. è Camphora*, ℥ij.
Spt. Volat. Aromat. ʒi.
Rad. Valerian. recent. pulv. ʒſs.
Miſce.

This draught was repeated every four hours.

I viſited her in the evening, and found her in a great perſpiration; pulſe 112, ſmall, and tremulous. She had ſome ſleep after the friction and draught. The ſighing, terror, and dread of water, ſtill remained. When the door was ſhut with ſome noiſe, ſhe ſtarted up in bed much frightened. She could not bear the light of a candle in her chamber. I aſked her why? She ſaid it appeared to her like the light of twenty candles, and diſtracted her head. I ordered the mercurial friction to be repeated at five o'clock the next morning.

On the 16th I viſited her in the forenoon. She had perſpired profuſely during the whole night, and ſlept at intervals. Her breath was already very offenſive, and her gums ſore from the two frictions, within the ſpace of nineteen hours. Pulſe 96, but irregular; all ſymptoms abated. I ordered the draught to be continued, and a repetition of the friction at five o'clock in the afternoon. I viſited her again at nine o'clock in the evening. She had perſpired

conſiderably

conſiderably all the day. Her gums were much affected by the mercury, and the ſaliva began to flow plentifully. I ordered the draught to be continued, and the friction to be repeated at five o'clock the following morning.

On the 17th I viſited her about noon. The mercury had diſordered her bowels in the night; and brought on tormina and bloody ſtools. Thus, the ſalivation was checked, and the draught neceſſarily diſcontinued.

The evils being removed, the ſalivation returned in the moſt extenſive manner, and continued until the 29th, when it began to abate, declined gradually, and ceaſed.

Four ounces of the ointment, all that was uſed, were rubbed in, and completely ſo, at four frictions, within 48 hours.

She is now in perfect health, and I am under no apprehenſion concerning her ſafety.

This is the only caſe of complete Hydrophobia, from the bite of a Mad Dog, ſucceſsfully treated, on record.

But in this caſe, the Hydrophobia was recent, and timely diſcovered. The dyſcatapoſis, or difficulty in ſwallowing, and the choking, had not began their dreadful parts of the tragedy. A few hours more would inevitably have produced them. Then all hopes would have been cut off from any advantage by internal remedies, which are now of the utmoſt

auxiliary importance, in preventing, what can never be cured—theſe direful precurſors of the fatal Rabies.

It is my practice, and I recommend it to others, when called to patients bitten by a Mad Dog, to try them immediately, and from time to time, with water, in the manner above related, in order to detect, as early as poſſible, the Hydrophobia; or firſt decided ſymptom produced by the poiſon of a Mad Dog.

Had I not done ſo in this caſe, the patient would have been loſt. A few hours more elapſed, there would have been no poſſibility of exhibiting medicines internally; and the period between the ſecond ſtage of the diſeaſe, and death, is ſo ſhort, that there is no time for external applications to find their way, effectually, into the ſyſtem.

I have known ſeveral inſtances, two of which lately occurred in the neighbourhood of Chelſea, of people dying from the bites of Mad Dogs, without its having ever been aſcertained whether there was Hydrophobia.

This leaves room for doubts, and wrong concluſions, among thoſe who are not acquainted with all the characteriſtics of the diſeaſe; eſpecially, when the power of ſwallowing liquids, without much difficulty, returns,—as it did in one of theſe two caſes, and alſo in that of young METCALFE.

The

The return of the power of ſwallowing has never been noticed before; but I muſt obſerve it is very common, after the ceſſation of the violence of the convulſive ſtruggling, ſpitting, and foaming at the mouth, which uſually happens a little before the patient dies.

ON CANINE MADNESS.

In my work on *Tropical Diſeaſes*, *Military Operations*, and *Climate of the Weſt Indies*, I have ſhewn that the bites and ſtings of all venomous animals are cured,—the remedies being inſtantaneouſly uſed,—by the ſame local means; and that theſe local means are very ſimple, if they were always at hand.*

In the ſame work I obſerved,—

It has always been a matter of ſurpriſe to me, that Hillary ſhould ſay Canine Madneſs "is ſo frequently ſeen in moſt hot countries, and eſpecially in the Weſt Indies, that it may be ſaid to be endemial,"† which is ſo far from being true, that if Hillary, who treats of it, and relates ſeveral caſes that were under his care in Barbadoes, had not been a man of good character, I ſhould have doubted whether he had ever ſeen a Mad Dog in the Weſt Indies. I am aware that Hughes, in his *Natural Hiſtory of Barbadoes*, ſays, "This diſeaſe was there in or about

* Fourth Edition, p. 35.

† *On the Diſeaſes of Barbadoes*, p. 245.

the

the year 1741; and that a Cow, in an Hydrophobia, was cured by pouring a pailful of cold water down her throat."*

During my residence in the West Indies, I never heard of the disease; and from the inquiries I have made, I am certain that there has been no Canine Madness in many of the islands, if in any of them, for fifty years, before the year 1783; and I am not satisfied with the authority which informs me it was ever there before that year. On the immense continent of South America, it has never been seen. ULLOA says, "The people there express their astonishment when an European relates the melancholy effects of it;"† and POUPPE DESPORTES, who practised physic in Hispaniola from 1732 until 1748, says, "In that island they are entirely ignorant of it."‡

It is certain that diseases undergo changes and revolutions. Some continue for a succession of years, and vanish when they have exhausted the temporary, but secret cause which produced them. Others have appeared and disappeared suddenly; and others have their periodical returns.

* Page 33.

† Liv. V. ch. vi.

‡ A Saint Domingue on a l'avantage de ne pas connoître la Rage. *Histoire des Maladies de S. Domingue*, Vol. II. p. 157.

In

In the ſpring of 1783, Canine Madneſs broke out in Hiſpaniola; and in the month of June in Jamaica, where it raged until March, 1784. It was ſaid at firſt, that it was brought to Jamaica from Hiſpaniola; but experience proved the fact to be otherwiſe.

The common notion that this diſeaſe among Dogs can only proceed from the poiſon of an external bite, or that it originates in ſome particular Dog, from internal diſeaſe, and from thence is diſſeminated, has excluded the idea of ſpontaneous madneſs, ariſing from ſome peculiar influence in the air. But this influence of the air generated the Canine Madneſs in the year 1783, in the Weſt Indies; for it was general, and many Dogs were ſeized with it, that had no communication with others; and ſome Dogs which were brought from Europe and North America, and that were not on ſhore, went mad on their arrival in the harbours of the iſlands.

The ſame atmoſpheric cauſe produces this diſeaſe almoſt every year among foxes, wolves, and Dogs, in many parts of Europe; ſome inſtances of which I have ſeen in my travels.

In Venice I found the common opinion to be, that the diſeaſe is often occaſioned by thirſt; for which reaſon all barbers, ſhoemakers, and coffee-houſe-keepers, are obliged to have a ſmall tub or pan of water before their doors, particularly in hot weather, that the Dogs running

about

about the ſtreets may drink when they want, as there are no places in that city where they can otherwiſe ſupply themſelves with freſh water.

In 1783 this diſeaſe was general in Jamaica. Many negroes were bitten, and died Hydrophobous.

A boy belonging to Mrs. Inglis, in Kingſton, was bitten by a little Dog ſuppoſed to be mad, which was therefore killed. The bite, or rather ſcratch, was not larger than one made by a pin, being only a raſure of the ſkin by a tooth. It was thought too inconſiderable to be hurtful. Four months afterwards the boy was ſeized as if he had got a cold, and ſoon after ſymptoms of a Tetanus appeared. He died on the third day, but had no ſymptoms of Hydrophobia.

An attorney at law in Kingſton was bitten by his own Dog. The bitten part, which was in the ball of the thumb, was removed. He was then ſalivated by mercury, externally and internally uſed; and he had no ſymptoms of diſeaſe. One of his negroes was alſo bitten, and treated in the ſame manner, and with the ſame ſucceſs.

Many hogs and goats were bitten, and died mad.

An horſe belonging to Mr. Edward Eaſt, in Liguanea, was bitten, and being ſeized with madneſs, was ſhot. Another horſe, belonging

to

to Mr. Andrew Cathcart, a merchant in Kingſton, was bitten. He broke out of the ſtable and ran about mad, until by beating his head againſt a wall he killed himſelf.

In the cure of the bite of a Mad Dog, the local treatment may alone be depended on, when recourſe is had to proper means, immediately after the accident.

The injured part muſt be deſtroyed, or be cut out. Deſtroying it is the moſt ſafe and certain; and the beſt applications for that purpoſe are the *Lapis Infernalis*, and the *Butter of Antimony*. Theſe are preferable to an hot iron, which the antients uſed; becauſe an hot iron forms a cruſt, that acts as a defence to the under parts, inſtead of deſtroying them.

The *Lapis Infernalis* is much better than any other cauſtic, as it melts and penetrates during its application.

The bitten part muſt be deſtroyed to the bottom; and where there is any doubt that the bottom of the wound is not ſufficiently reached, *Butter of Antimony* ſhould be introduced, occaſionally, as deep as poſſible; and inciſions ſhould be made, if neceſſary, to lay open every part to the influence of the cauſtic. In deſperate caſes, inciſions ſhould be made round the wound, to prevent the virus from ſpreading.

The wound is to be dreſſed for ſome time, with poultices, to aſſuage the inflammations

caufed

caufed by the cauftics; and afterwards with acrid dreffings, and hot digeftives, to create a difcharge, and drain the injured parts.

The moft fpeedy, and moft effectual method of deftroying the flefh, or of making an opening, is, firft to apply fome *Butter of Antimony*; this muft remain until it caufes a vefication, or corrofion of the cuticle. Then the *Lapis Infernalis* will foon occafion the deftruction of all organization within an extenfive fphere of action; by which, infenfibility to the operation of the poifon is produced, and an incapacity of diffufing it.

Whether animal poifon be diftributed by the conveyance of the folids, or of the fluids, is a queftion with many; but not with me. For the poifon of fome ferpents acts, in a few minutes, fo as to diffolve the bond of union between thefe elements, which conftitute the human frame, and extinguifhes life. Whereas, the poifon of a Mad Dog will remain inactive in the fyftem, without any apparent, or perceptible effect, even in the part where it has been inferted,—for many weeks, and often for many months.

The lymphatic movement is too flow for one of thefe operations, and too quick for the other. But I have difcuffed this fubject elfewhere.*

* *Treatife on Tropical Difeafes*, &c. 4th Edit.

When

When the abovementioned Caustics cannot be procured, Oil of Vitriol, Aqua Fortis, Spirit of Salt, Corrosive Sublimate, Common Caustic, Brine, a strong solution of Common Salt, or a plaster of Quick Lime and Soap, may be applied to the wound. Gunpowder laid on the part, and fired, has been used with success.

A person bitten, remote from medical assistance, will seldom be so circumstanced as not to be able to obtain one or other of the preceding remedies. Should it so happen that he cannot, an hot iron can always soon be procured. The wound should be seared with that; which will be a temporary arrest to the action of the virus.

Mercury, in the tardy manner it has always been employed, is of no use; nor have any of the vaunted compositions imposed on mankind, ever produced effects which could be depended on. People have taken them, and Hydrophobia has not appeared. So it is often, when no medicine whatever has been taken.

Where there has been no remedy used, though the bitten part be healed, and the cicatrix shew no sign of breaking open, or festering, it should be removed by taking out the part all round, deeper than the wound originally was, with *Butter of Antimony* and *Lapis Infernalis*, in the manner already described.

If

If pain, numbneſs, tingling, itching, redneſs, or blackneſs in or near the wound, or in the limb in which it is ſeated, have already taken place, the patient is in peril; Hydrophobia is not far off; and there is no time to be loſt.

Mr. METCALFE had an excruciating pain in the arm of the bitten hand, extending from his ſhoulder to the ends of his fingers, which attacked him two days previous to the Hydrophobia. The pain left his arm when the Hydrophobia came on. This was the time to have ſaved his life. But he thought it was rheumatiſm, and had no idea of his ſituation.

What could have excited this long latent miſchief into action? There are no grounds for believing the poiſon had ever travelled out of the limb, wherein it was depoſited, before this time; for he was in perfect health. The flame burſt forth in a moment; from embers which had been ſmothered, during a period of between four and five months.

Mrs. LACASE, on the contrary, was never entirely well from the time ſhe was bitten; and became Hydrophobous in twelve days.

Who can reaſon on theſe data?

The method here adviſed of treating the bites of Mad Animals, accompanied, where there has been any delay, with antiſpaſmodics and mercury properly, externally or internally, uſed,

ſo

ſo as to tranquiliſe the nerves, and affect the ſalival glands judiciouſly, will prevent all evil conſequences.

In this diſeaſe, and indeed in all others, where mercury can with equal efficacy be uſed externally, it ought. The ſtomach ſhould be reſerved for other medicines; and to be diſpoſed of according to exigencies.

Samuel Haines, game-keeper to the Duke of Bedford, was bitten by a Mad Dog at Woburn Abbey, on the 21ſt of October 1788, in his right hand, by which two wounds were made; one of them was conſiderable. He was ſent to me four days after the accident. I had both wounds deeply deſtroyed by the *Lapis Infernalis*; and well ſearched, afterwards, and dreſſed occaſionally with *Butter of Antimony*. He took calomel until his mouth was properly affected. The wounds were kept open for a month, with *Red Precipitate* and digeſtives. He returned home, and continued perfectly well. The Dog died mad.

I have often mentioned this Caſe of late years, merely to ſhew, that my doctrine is not newly adopted. I had ſeveral other patients in the year 1788,—as Canine Madneſs then raged in England,—whom I treated in the ſame manner. I have likewiſe had many ſince; and many long before that period in different parts of the world,

world, and from my own practice, I never had the misfortune to ſee Hydrophobia.

All the genuine ſymptoms of Canine Madneſs preſented themſelves in the two preceding Caſes. The ſubjects were young, ſtrong, and healthy. But in ſuch a perturbation of the animal ſpirits, as happens in this diſeaſe, other phænomena, the offspring of peculiar organization, muſt ſometimes occur.

A boy of eight years old, who died of Canine Madneſs in November laſt, 1807, had an inſupportable ſenſe of ſuffocation, in walking with his face to the wind,—but not otherwiſe. This circumſtance, with head-ache, conſtituted the firſt ſymptoms. They appeared on a Tueſday. Afterwards he went the whole round of miſery, and died on the Saturday following. His parents informed me, (for I did not ſee him) that during his ſtruggles he complained, when his mother fanned him, that he could not bear it; as the wind occaſioned by the fan choked him. He was bitten between ſix and ſeven weeks before his death.

It has been cuſtomary to call this diſeaſe by the general name of Hydrophobia, but that is incorrect; therefore I divide the diſeaſe into three ſtages.

I. *Hydrophobia*, or the dread of water.

II. *Dyſcatapoſis*, or difficulty in ſwallowing, and choking.

III. *Rabies*, or convulſion, attended with vehement ſpitting, and frothing at the mouth.

The ſymptoms ariſing in the ſyſtem from the bite of a Mad Dog, antecedent to Hydrophobia, are of that deſcription called—nervous; conſequently various, in different conſtitutions.

Not apprized of this, writers have erroneouſly conſidered ſome peculiar ſymptoms, as univerſal characteriſtics of the diſeaſe. The ſame error has been committed in the convulſed ſtate.

Canine Madneſs ſeems to be a mixture, or rather a ſucceſſion, of Hyſterical and Tetanic affections.

Apprehenſion, lowneſs of ſpirits, and fright, at firſt; in which ſtate, the nervous influence is only concerned; and the voluntary, and involuntary functions remain undiſturbed. To this condition ſucceeds ſpaſm in the throat,—the region beſieged by all paſſions combined with fear, or dread. Then univerſal muſcular convulſion makes an horrid attack, and ſubverts the whole order of nature.

B. M.

Chelſea Hoſpital,
3d February, 1808.

FINIS.

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