

pain in the direction of the Diaphragm, and w<sup>c</sup> is generally attributed to the Lungs w<sup>c</sup> like the heart is rarely if ever the seat of pain.

At this period of the distemper there is often a peevishness or fluctuating despondency; the eyes become hollow and diminished in their vivacity; and yet it has been observed that when the increased sensibility or hectic paints the the cheek with crimson, and scorches the palms of the hands and soals of the feet, the despondency relents, and the eyes assume a brilliancy, and hope gives her false signal of victory. The faculty & the aberrations of the powers of the Stomach should never be overlooked by the carefull Physician. This prime organ is the Index of the human volume. It tells every thing if wisely consulted. Thick muscular parts with red fibres are capable of simple pain from over distension, and contraction; but the stomach has beside sensation of another sort. There is the sensation from hunger & thirst, from cardialgia - from flatus - from nausea, and from deep anxiety, and also some other sensations, for w<sup>c</sup> we want of name. sudden strokes of surprize, and shocks of terror are directly felt in the pit of the stomach or epigastric region, including always that unique organ the Diaphragm, for that balancer of the body is the last organ that dies, and constitutes chiefly that central point on w<sup>c</sup> the energy of the animal economy principally depends, and w<sup>c</sup> has erroneously been called from the earliest times of the Jewish history the Heart.

After the Stomach, or rather this whole central region has laboured on some time, there is now & then felt a slight difficulty or ~~other~~ <sup>eminence</sup> in breathing or shortness of breath in going up stairs, or ascending undeckly, to relieve w<sup>c</sup> the sufferer heaves every few moments a sigh or deep expiration, w<sup>c</sup> if it do not increase from day to day, it does from week to week, and now marks of a more alarming nature meet our view - as the brilliant eye, the abruptly defined damask cheek, and a voice though feeble often exquisitely toned, and not unfrequently a sudden propensity to tears either from an organic affection or pathemata animis. To the young and inexperienced these beautiful appearances are mistaken for the glow of returning health, and the unhappy sufferer is sometimes & constrained to shew herself in public company against her inclination, when alas! they are the ensigns of approaching ill<sup>th</sup>.

The skillful Physician is not led astray by these flattering appearances. He knows they arise from an incompetent supply of food, and from want of a regular and harmonious co-operation of the female animal economy, for now the disordered frame is feeding on itself. The flushed cheek & miserable smile of such a patient are worse than <sup>her</sup> tears. They ~~do~~ announce the breaking down of every part of the body, the Brain perhaps alone excepted; the immortal faculties of the mind are often ineffably brilliant exhibiting the hectic of genius, — or the genius of hectic, denominate it which you will — or both. \*

In this stage of the distemper, or rather disease, for it now deserves that epithet, the patient relishes the open air rather than a closed room, and I have observed several who feel relief from a snow-storm in ascending stairs, she every day progresses with a slower step, and more difficult respiration, w<sup>c</sup> is unlike that of asthma. In many cases, even now, there shall be no cough, nor any one symptom indicating unequivocally the existence of tubercles or ulcers in the lungs, or inflammation of its mucous membrane. There is the peculiar hectic sensibility, lassitude and wasting, and progressive feebleness; but in cases of this sort, dissections after life have discovered fewer alterations in the structure of the breathing organs than one would have *a priori* supposed, where there was so much emaciation, and evident consumption.

It is a singular condition of the human frame, and its very essence is a consumption or delapidation of structure, in uniform decrementum, and regular decline from the plenitude of health to a condition too feeble to contain the vital, or actuating principle; a <sup>down</sup> metting, or wasting of both fluids & solids. Yet, while wasting to a skeleton, some patients are buoyed up with hope; and others dejected and disengaged with, if we may so speak, a drying up of the heart, which nothing can remedy, or alleviate. One more dark stroke finishes the picture: Some are very petulant, and prone to anger, — or have a great aversion from, or dread of their nearest and dearest connexions. Others, once reputed morose and churlish, become tender-minded, susceptible to kindness, and a fear of giving trouble. Both of these opposite feelings must be regarded as a part of the disease. The feet smell, and lastly the wrist, and then follows

\* The catamenia, w<sup>c</sup> is a pretty certain index of the whole system fluctuates <sup>an</sup> with these varying symptoms. Its irregularity <sup>is</sup> rather the consequence than the cause of the general disorder of the body. They render the septennial periods needless.

an exhaustion of the heart, and an evaporation of life.

During this extreme scene the mind shall oft times be little or nothing impeded - nay sometimes blazes up with surprising brightness. And here I cannot resist a remark which I shall find occasion to enforce hereafter. Referto the unfeelingness - the cruelty of sending young persons from the bosom of their families to distant regions, when they often endure violent concussions on ship board in boisterous weather, seasickness, bad smells, and die, in the midst of the abominable nuisance, or when landed on a west India, or ~~any~~ some other foreign shore, go out of life amid strangers with black slaves for nurses, in places of their mothers, sisters and other affectionate attendants - and all this in the heart-rending scenes of approaching death!

Let us imitate the Painters who in studying their art, place their Academic figure in the centre of a circle, so that each student takes a different view of the human person, and then compares his own drawing with that of his neighbor, or his opposite.

Dr Cullen defines the Phthis Pulmonalis to be an expectoration of pus or purulent matter from the lungs, attended with hectic Fever. This is just, but too scanty.

Dr Thomas Reid defines it to be an expectoration of purulent matter from the lungs by means of frequent coughing, attended with a fever of a peculiar kind, morning sweats, and remissions in the forenoon, occasioning a wasting of the flesh and strength.

This last definition adds cough, while Cullen judiciously omits it. Cough can hardly be considered a disease any more than sneezing. It is an instinctive action, partly voluntary, and partly involuntary to get rid of a collection of matter, or irritation resembling itching in the lungs, or in the wind pipe or trachea. The throwing up offensive matter from the lungs is not unlike pumping bilgewater out of a ship, which may answer two purposes - one to prevent sickness from its effluvia, and the other to prevent her sinking. The mariner must keep the pumps going if he cannot remedy the leak in the hull of his ship, and so must the Physician. Squills - Gum Ammoniac, and other pectorals will keep the pumps in action, and opium choke them; and the practitioner has to choose between them.

It

\* Whether to stop a cough is a serious question. Patients often say - I have a troublesome cough, and can get nothing to stop it; and we hear practitioners say - If I could stop your cough, I should have hopes of curing you, and therefore dose him with opiates.

There is another Disease resembling the Phthisis Pulmonalis, but varying in several points from it. In Bills of Mortality in England as well as in America it is generally called Consumption. It is a condition of the body w<sup>e</sup> some have called Febricula: others Chronic weakness; and others, after the ancient, Asthenia. It is an affection common to young persons of both sexes. According to my own observation the males are more liable to it than females. We prefer Dr Willan's description of it, in his reports on the diseases of London, the largest city perhaps now existing in the world, and where the manners, customs and habits are very like our own, although three thousand miles distant.

Asthenia commensis with a general languor, and a sense of painful lassitude, or aching of the limbs, and often with tremors. These symptoms are succeeded by shooting pains, headache & giddiness; and by a disposition to sleep, even in the day-time. With a sensation of faintness, or depression of strength, the patient constantly lays his hand on the pit of his stomach, and tries to remove it, by often taking small portions of nourishment, and too often stimulating drinks. But this craving is not accompanied with a corresponding activity of the digestive powers. Hence an overcharge commonly takes place, producing heart-burn, flatulency, eructations, nausea, and sometimes, what is commonly called sick head ache; from w<sup>c</sup> they are sometimes relieved by a diarrhoea. Females with these symptoms are often distressed with pain in the left-side.

This affliction takes away the ability and inclination of any considerable corporal exertion, and renders a close attention of mind to any subject not only difficult but painful; and the temper becomes irritable, fretful and capricious. Hence comes defective and varying judgment, and irresolution; and his imagination suggests nothing but gloomy ideas, sleeping and waking, w<sup>c</sup> often extends to despondency. In all this it differs from the Pulmonic Consumption with hectic symptoms. No taste remains for accustomed amusements, for every sensation seems tinged with unpleasantness. The night sleep is short and disturbed by startings from unpleasant dreams; and he leaves his bed in the morning unrefreshed.

unrefreshed, and feeling sore and fatigued. There is a general weakness of all the limbs, while the vital powers retain considerable vigor, and the growth of the juvenile subject is advanced rather than impeded.

We may obtain a clearer idea of this distemper of the body by enumerating its ordinary causes. These are sedentary occupations in small rooms and impure air; irregular modes of living as in large and very crowded cities, dis appointed emigrants, person confined to a dull and unvaried track of employment, house servants, especially those direct from the country, and serving in houses of the rich & fashionable, where they have protracted and irregular meals, little sleep, discontent and anxiety. Also on the other hand those who withhold from themselves no indulgence. These debilitating causes sink some in Typhus fever, and others differently predisposed by scrophula, and other causes, and are depressed by a chronic weakness denominated Asthenia. These causes operate in all seasons, but in summer the complaint is aggravated by the relaxing influence of a warm, dusty atmosphere, to w.<sup>c</sup> may be added the stifling heat reflected from continuous brick walls, and burning pavements.

It is the white inhabitant, that suffers most from a hot atmosphere, while the Blacks rejoice in a hot one, but sink down and fade away, and moulder, and if we may say so rot away in the raw cold weather of February, and March. How many are doomed to toil out a large portion of the year in large manufacturing cities in Europe, who seldom enjoy the sun's rays in winter, or fanned by a cordial breeze in the hottest months of summer; And what is truly lamentable, in the moments of languor and discontent, they have recourse to the delusive aid of ardent spirits, w.<sup>c</sup> renders their disorder more inveterate, and they droop, wither, pine away and die. Some according to their occupation become paralytic, others according to exposure to inclement weather, rheumatic, but most of them hectical, and some most commonly females, by what would seem to merit the term of exhaustion of heart, when life appears to evaporate, while the more hardy males stagger to the grave by shorter road of intemperance.

Persons

Persons thus predisposed, and circumstances, either sink at once under a typhoid affection, or linger under hypochondriasis, or some particular derangement of the hepatic system, while those of a scrupulous taint, or tuberculous disposition betray signs of approaching consumption, while some of a strong marked sanguine temperament show out the lurid signals of approaching death; for after the harmony of the system is shaken, and the due balance of its functions deranged, that part of the human frame most defective, by constitution or accident, betrays its injured condition, and gives name to the deterioration. In this state or plight of humanity that distresses w<sup>e</sup> most easily besets him arises, when every pulsation of life, but aggravates the disorder, and confirms the fatal hectic.

In Galen's large lumber room of facts, we can find many things well worth the labor of searching out. From his collection we draw forth this fact, that in his day, and prior to it, the condition of the body w<sup>e</sup> Hippocrates called Phthisis and others hectic was marked by a long continued, slow Fever producing Tabefaction, without our being able to accuse any particular viscus or part of failing in its assigned function. Galen, adhering to the original meaning of the word, an hectical state or habitude, rather to a fixed and definite disorder, - a condition or disposition to many diseases, according to the situation and circumstances of the invalid. This time they sometimes confounded hectic with diathesis, and even used it in opposition to that term; and finally resorted to the word habitude, w<sup>e</sup> differs from diathesis, inasmuch as one is a chronic affection and the other acute. In that state of tabefaction and tabefaction, w<sup>e</sup> is generally denominated hectical, we find, post mortem, less fewer and slighter marks of lesion in the viscera than we supposed before the patient's death. We actually discover more imprelles of disease in the mesentery, the mere connecting media of the viscera, than in any particular viscous whatever, or in the glandular or lymphatic system generally.

The simple hectica debilium of the ancients is the marasmus, tabes or uniform wasting that occurs without any remarkable morbid

morbid affection of the lungs. The hectica phthisica with a cough is the disease we mean to discuss, and w<sup>c</sup> is mentioned by that admirable English Physician & Anatomist Dr Thomas Willis, an author too little studied in his natal solum, Old England. The tabes mesenterica appertains more perhaps to scorbuta than to the disease in question; for besides languor and want of appetite, it is usually accompanied with headache, and always with pain in the back and loins, and as the disease increases, by a tenderness of the belly, and a clayish hue and want of due consistency in the alvine discharges. It is remarkable <sup>that the appetite</sup> sometimes ravenous, exciting suspicion of worms.

In examination after life, the absorbent glands are found diseased, enlarged, and appear as if impervious. How far this leads to, or is connected with syphilitic abscess, we are not now prepared to say. None of us know too much of the essence of fever, nor can any of us speak in a positive style of an ideopathic fever, and are at a loss whether to term the commotion raised in wounds of certain joints as in the true hectic fever or simply symptoms of irritation. We may hereafter attempt to show that a consumption is not always a wasting of the body and limbs dependent on diseased lungs; but sometimes depending on diseased extra thoracic organs, or on a diseased lumber vertebra, or knee joint or both at once one time.

Is there not a gangrenous state of the lungs w<sup>c</sup> runs its fatal course with great rapidity that has, and may be mistaken for genuine Phthisis Pulmonalis?

The Lungs exercise a double nay a three-fold office, and breathing is only one of them; and breathing is inspiration and expiration while sanguification is a more complicated process, while the uttering of a vocal sound, modulated into speech is yet another office. From the lungs rises the Stentorophonic-Tube, w<sup>c</sup> under the name of trachea, asperia-arteria, or in common parlance wind-pipe, rises out of every part of the lungs, beginning in its lobes, ends in the larynx, and resonant mouth. It takes its minute origin in the vesiculae bronchiales or air-vessels, w<sup>c</sup> arise in every part of that breathing organ. These cells are lined and surrounded by an exquisit network of arteries & veins, w<sup>c</sup> communicate every way with each other. Each air-cell.

air-cell opens into a fine capillary-tube, and these beginings are so minute as to require a microscope to see them to advantage. On each side of every one of these tubes runs a pulmonary artery and vein. The minute bronchial ramifications widen as they advance, and become more distinctly cartilaginous. As the bronchial branches run on to form the wind-pipe, strictly so called, they diminish in number as they increase in size, till they at length form grossly-hoops; and at last emerging from each lobe, they form that large, elastic and sonorous tube, the wind-pipe. And this is that natural speaking Trumpet, or stentorophonic tube, with w<sup>c</sup> almost all terrestrial animals are furnished; and w<sup>c</sup> strikes us with admiration, because from its size we can see and examine its admirable formation, and see how wonderfully means are adapted to ends. Nor can we pass by without expressing our admiration of the close connection and immediate sympathy between this apparatus, and the human intellect; especially if we believe that it gives to Man alone the prerogative of speaking to his Creator. Not but what we recognize the like sympathy between these vocal organs, and the pleasurable feelings in animals beneath us, as well as in their pain, and distressful sensations.

The respiratory organs, ever moving from the first moment of our lives to the last, not only sympathize with the affections of the mind, but stamp them strongly on the countenance. They respond to every sudden and violent impression, yet are the lungs themselves hardly susceptible of pain, but are remarkably affected when pain is inflicted on distant parts, whether on the skin, or in the joints.

The whole of this breathing and vocal organ is lined with a membrane, smooth, soft and very irritable, guarding by its extreme sensitiveness, the avenues of life. It is owing to this vis sensitiva that every duct, fibre, fibrilla in the breathing apparatus sympathises exquisitely with different parts of the body; not merely with the Stomach, but with each & every part of the human system, and is powerfully affected by external nature. and not only obedient to every strong sensitive impression, but intellectual impression also; and from the wonderful combination of the heavenly-inspired alphabet is capable of communicating to

to others our own ideas, but our passions whether joyous or sorrowful.

Our object in giving this natural history of the breathing-organs is to remind the reader of its oxydating blood vessels, w<sup>c</sup> carry off from the blood something destructive to life, and receive in return a vivifying principle necessary to our existence. This has been noticed from the earliest account of humanity. The sympathetic affections are expressed by acceleration of respiration; alteration of the pulse, and a cough, or when pushed to extreme by an agonizing roar.

We find in the writings of Valsalva, the Anatomist, instances where every motion of the head occasioned a violent cough; and the cause was found after death, to have been in the brain. Siebold relates a fatal case of cough, with purulent expectoration, in w<sup>c</sup> the only morbid appearances were in the frontal and occipital sinusses. Sauvage speaks of an obstinate cough arising from an irritation of the auditory organs. De Haen mentions a most obstinate and untractable cough occasioned by a callous substance in the Uterus, w<sup>c</sup> ceased on its expulsion. Cough from worms in the alimentary canal is a case too common to be mentioned. Is it not a fact that sympathetic coughs are found to be louder & stronger than those arising from local disease of the lungs themselves?

The antiquity regarded the lungs as the furnace of animal heat,

It is called in the sacred writings "the breath of life". "My breath says Job, is corrupt, and my days are extinct. The breath of the Almighty has given me life, and David - Thou takest away their breath and they die"

## The Diaphragm.

The more I contemplate the human frame while in health, and scrutinize it when disordered, the more I am confirmed in the opinion that the Diaphragm is a vital organ is of more importance in pathological enquiries than Practitioners in general are aware of. The Heart in the lungs appears to take the lead of all other organs in the system, while the more sensitive Phrenes is hardly thought of; but is considered a mere Muscle, or partition separating the Thorax from the abdomen; and hence called in modern Saxon the midrife, a simple partition. Not so the Father of Medicine He called it Phrenes, connecting it in office with the Brain, the seat of thought, and the main-spring of motion within us. And all the great Masters of the art have followed Hippocrates in his enlarged ideas of that prime colony of the Brain, as Galen - Willis - Sydenham - Boerhaave - Haller - Hoffman - Fothergill, and The two Hunter's. These bright stars in the medical firmament have considered the Stomach & Duodenum and the Phrenes, being that region denominated the fore-stomach or cardia, as the fountain of the most important influences in our bodies. By which term we mean impulsive power, ascendant prevalent, blasing, and regulating power. It is not the leaden weight of the clock but the pendulum w<sup>c</sup> regulates its motion.

The more I contemplate the human frame in health, and the more I scrutinize the same body disordered, the more I am confirmed in the opinion, that if to the stomach, and its appendix the duodenum, we add the diaphragm, we shall find they are the fruitful source, and primary seat of the greater part of all the internal distempers that flesh is heir to; and that the Physician who is skilful in removing their complaints, has learnt more than two thirds of his profession. The heart has been affected with ideopathic disease so as to reduce it in size and firmness of its texture, and yet the patient has lived long in that condition without any very remarkable distress; but that is not the case with the Diaphragm and the parts immediately below it. If these parts w<sup>c</sup> taken collectively, are called the Epigastrium are seriously diseased, the whole man languishes, wilts - fades and sinks, in mind as well as in body. When the prime function of the stomach, for it has more than one, fails, the whole chylopoetic viscera, the first as well as the second "concoction" is

is impaired; the patient becomes melancholly, emaciates, becomes either a bluish-pale, or yellowish pale, with a famished aspect, faints and at length dies. I am sorry I cannot state the variation of the quantity and condition of the urine, a matter of importance in diseases of those parts, but alas! too much neglected by us all. The pulse so much attended to and so fashionable are of little consequence compared with the quantity, condition, and frequency of this excretion. There is a sympathy or short cut between the prime office <sup>of and that of the kidneys and bladder</sup> and the stomach, that sets all anatomical knowledge at defiance, and yet of the first importance in the practice of physic. Some fluid is thrown into the stomach occasion an almost instantaneous discharge of urine, and the like happens on a great and sudden fright that strikes first the epigastrium.

This central influence, emanating from the phrenic & stomachic region cannot be too closely attended it. If the functions of these parts be well performed, the digestion will be completed in three or four hours - the chyle will be proper through the articles of food be various, the secretions and excretions will be regular, and cheerfulness will flow from a healthy feeling. But if the powers of the stomach languish - not merely its digestive power, but the power of transmitting fresh life and vigor to the most remote part of our system, the contrary of all this must occur, be the articles afford whatever they may -

Free and perfect respiration and digestion depend on each other; for while the stomach is digesting solid food, the lungs are digesting air; for we should constantly bear in mind in the morbid affections of the lungs, that when the patient inhales the atmospheric air, the respirating organs, in the compound action of breathing, separates that portion of the inspired mass, that small portion, which under the name of spiritus-vitalis, or oxygen, enters the blood, altering its color, and vivifying and animating the whole system, mind as well as body. The young Physician should constantly bear in mind that between this oxygenation of the blood in the lungs, and the digestion of the food by the stomach, there exists an inseparable sympathy, and admirable balance. On this depends, in a great measure, the variations of the pulse. The place where the patient is must be taken into consideration, if close, confined, smelling offensive from various filth, and his own effluvia, his pulse will rise in its force directly on passing out of the <sup>confined</sup>

confined place into the open air. In a word, the inferior portion of the stomach, the precordia, diaphragm, and upper part of the duodenum seem to constitute the Head Quarters of the Animal Economy. This region, is the focus, or fire-place, the source and origin of our animal energies—the seat of our best as well as of our worst feelings. From this murky cave issues the crimes of drunkenness, and every evil word and work of fell Intemperance in the vicious, and of good feelings, and noble deeds in the wise and prudent.

While this stomachic and phrenic region is the grand source of our active, muscular or mechanic powers, it is, at the same time the original seat of almost all our maladies. And we need not wonder when we consider that <sup>in</sup> this Diaphragmatic spot is placed the citadel, focus, or nervous power to w<sup>c</sup> the whole alimentary canal, and assistant viscera, together with the urinary, and uterine organs depend for support. It is in one view a colony of the brain, and maintains a remarkable connection with the mind. It is, alternately, the seat of hilarity and woe. Here moping melancholy entrenches itself deep against every thing joyous. When depression sits too heavy on the diaphragm, it endeavors instinctively to relieve itself from the incumbent load by a heaving sigh. Should anxiety increase to affliction, the sigh shakes the vocal organs with a groan-sigh. Should affliction progress to agony, then short and low-value sobs follow: and when distress is augmented to anguish, a violent scream is the last effort toward mitigating the feelings of wretchedness. After which comes fainting and death. It is, probable from observations of thy sort, that ancient Physicians were led to call that that great and wide spreading nerve w<sup>c</sup> entering the diaphragm strike out like radii from its centre the Phrenic nerve, as more immediately connected with the mind, especially when noticing its inosculation with the sympathetic, and the cæliac plexus and remarkable ganglia; or that central net-work of nerves w<sup>c</sup> goes to the liver, stomach and duodenum. We mention these visible anatomical connections to aid the lucubrations of the student when he is seeking the living among the dead, in hope of discovering the reason why patients in the last stage of consumption have often a fine phrensy, or an hallucination distressfull to himself and those nearest to him; for the Consumption, or uniform delapidation of the human structure sometimes

Sometime resembles a consuming fire and sometimes the evaporation of a fluid.

Herman Boerhaave the celebrated Professor of the Theory and Practice in the famous University of Leyden was distinguished for his accurate histories, or delineations of diseases, exemplified in his description of Fevers, and inflammations in acute disorders, and of Epilepsy in chronic ones; and Cullen of Edinburgh was almost as renowned a condensed orde in his definitions; but sometimes sacrifices precision to laconicism. He defines Phthisis Pulmonalis - an expectoration of pus, or purulent matter from the Lungs, attended with Hectic fever. And this involves several questions, 1<sup>o</sup> What is pus or purulent matter - 2<sup>o</sup> What is a hectic fever. He presumes that in every expectoration of pus there is an ulceration of the Lungs. When Boerhaave flourished and thirty years afterwards when Cullen taught the nature of pus was not accurately known, nor was that yellow matter congealed up in chronic catarrhs, when there were no signs of hectic, satisfactorily ascertained. The yellow matter thrown out by coughing was so alike that physicians could not at once determine which was only a yellow mucus, and w.<sup>c</sup> the fatal gangrene. The colour of the matter was fallacious, and so was its consistency, and Physicians in consultations could seldom agree as to its odour, for there is as much of variety in our smelling as in our sight. Chemical tests are, I almost said as little to be depended on as the chemical tests made use of

of discover the medicinal qualities of vegetables.

The Phthisis is accompanied with a fever of a peculiar kind, denominated hectic, a word derived from the Greek meaning simply a habit; and as this habitude is the essence of the disease we have only to describe it.

An hectic fever then is known to exist when there is a latent fever which begins in the evening, and is alleviated in the morning by a sweating, and remissions in the forenoon, so that there are exacerbations twice every day. The first of these appears about noon, and the other commences about five in the afternoon, w<sup>c</sup> gradually increases till midnight, and holds on till about two o'clock when a gentle sweat commences, and increases as the sun advances. That in the evening may be considered the natural evening paroxysm. w<sup>c</sup> occurs with us all on becoming sleepy, and is always attended with some degree of shivering, when the sufferer seeks external heat, being exceedingly sensible to any coolness; and is remarked to complain of a sense of cold, when to the thermometer his skin is preternaturally warm. The evening paroxysm is the most considerable, from its co-operating with the natural increase of the pulse at that period.

On the first appearance of the hectic, the urine is high-coloured, and deposits a copious branny, red sediment, w<sup>c</sup> rarely falls quite down to the bottom of the vessel. I pretend not to account for this appearance, and while I confess my ignorance, I lament that the variations in the state, and aspect of the urine is so little attended to in practice, being of opinion that the Urine if studied and closely remarked on will prove a very valuable index in pathology, and a curious speculation in physiology.\*

We have our doubts whether a hectic is, strictly speaking, a fever; for the appetite is not impaired as in genuine fever. The tongue is cleaner, and in the later stages of the disease, the tongue and the fauces have a peculiar appearance of inflammation, w<sup>c</sup> finally degenerates into that species of mortification termed aphtha, w<sup>c</sup> arise from want of due energy in the parts affected.

\* A fever exists and progresses independent of its first cause being made up of repeated exacerbations & remissions till it subsides by a remarkable remission termed a crisis; but a hectic deviates from this course of operations. The knee joint e. g. shall be wounded, inflamed, or ulcerated, and occasion a hectic-fever, amputate the limb above the knee, and the hectic-fever is removed at once by removing the cause of the irritation.

27<sup>th</sup>

The face is commonly pale, but during the exacerbation, a florid red, and an almost circumscribed spot appear on each cheek. As the disease advances, the red vessels of the adnata of the eye disappear, leaving the whole of the adnata of a pearly white. The intestines are often constricted, but in the advanced stages of the disease a diarrhoea almost always comes on, and continues more or less during the course of the consumption, and alternating with the sweatings. With commonly a slowly increasing debility, an emaciation or breaking down of the human fabric, a gradual and sorrowful delapidation, or decrementum of the subject, very aptly expressed by the English word Consumption. From lack of nutritious nourishment in the skin, the hair falls off, and the adunquity of the nails appear from the same cause. All symptoms of desumation or abstraction of nourishment. Then follow other symptoms of general weakness as oedematous swellings of the feet, and in the last stages, the like swellings of the wrists.

It is remarkable, that the exacerbations of fever are seldom attended with any head ach, and very rarely with delirium and when a delirium does come on it is peculiar, the patient get a wrong notion of things, yet argues consistently were his ideas true, such as the enmity of his dearest connexions, with apprehensions that they design to destroy him. Yet in many instances - nay, in most, the judgment remains entire to the end, and most commonly, they are confident and full of hope.

Professor Cullen whose is so happy in his definition of diseases, and whose oral instruction I equally admired, & says in Chap. III. par. 74. that he has never seen a fever under the title of Hectic, as a primary disease, but constantly found it as a symptom of some topical affection, most commonly of an internal suppuration. He adds, I have never seen it in any case, when there was not evidently, or when I had not ground to suppose, there was a permanent purulence or ulceration in some external or internal part: and he subjoins, - Indeed, it appears to me to be always the effect of an acrimony absorbed from abscesses or ulcers, although it is not equally the effect of every sort of acrimony; for the scorbutic and cancerous kinds often subsist long in the body without producing hectic. Here the learned Caledonian is compelled to admit what he had taken great

\* In the years 1775 and 1776.

pains

pains to explode from the Boerhaave<sup>n</sup> pathology, in w<sup>c</sup> the spasm of the extreme vessel has no place, or very little. Indeed, fever is in a great measure among the inscrutable things in the human economy. Inflammation belongs to terrestrial quadrupeds, but fever we suspect adheres to humanity alone [?].

Among the most frequent cause of Consumption in New-England, as well as in old England is exposure to cold combined with moisture, w<sup>c</sup> those predisposed to it by malconformation, or family idiosyncrasy, or that inscrutable affection, or bias to phthisis, experienced in certain families of young persons is COLD, w<sup>c</sup> generally follows after the severity of winter, that is, from about the middle of March to the latter end of May—when we in this climate are liable to suffer from the very variable weather, from sudden cold after a warm day, or from an equally sudden change in the same day. It is not the absolute but the relative cold that does the mischief.

Warmth is friendly to man, and from what we observe in animals next in rank beneath him, nearly as comfortable to them. Provided by nature with the means of comfort in their furs, and guided by unerring instinct, they pursue and attain what is beneficial, and almost always avoid what is destructive, if left to themselves, free from the interference of man. The young of hirsute quadrupeds are kept warm and comfortable by the hair of their dams. This natural cloathing w<sup>c</sup> is light in summer, thickens in winter, and remarkably so on the approach of winter in very cold regions. The same is the case with birds, especially with the web-footed, and strikingly so with the eider Duck in the North of Europe, and in Canada.

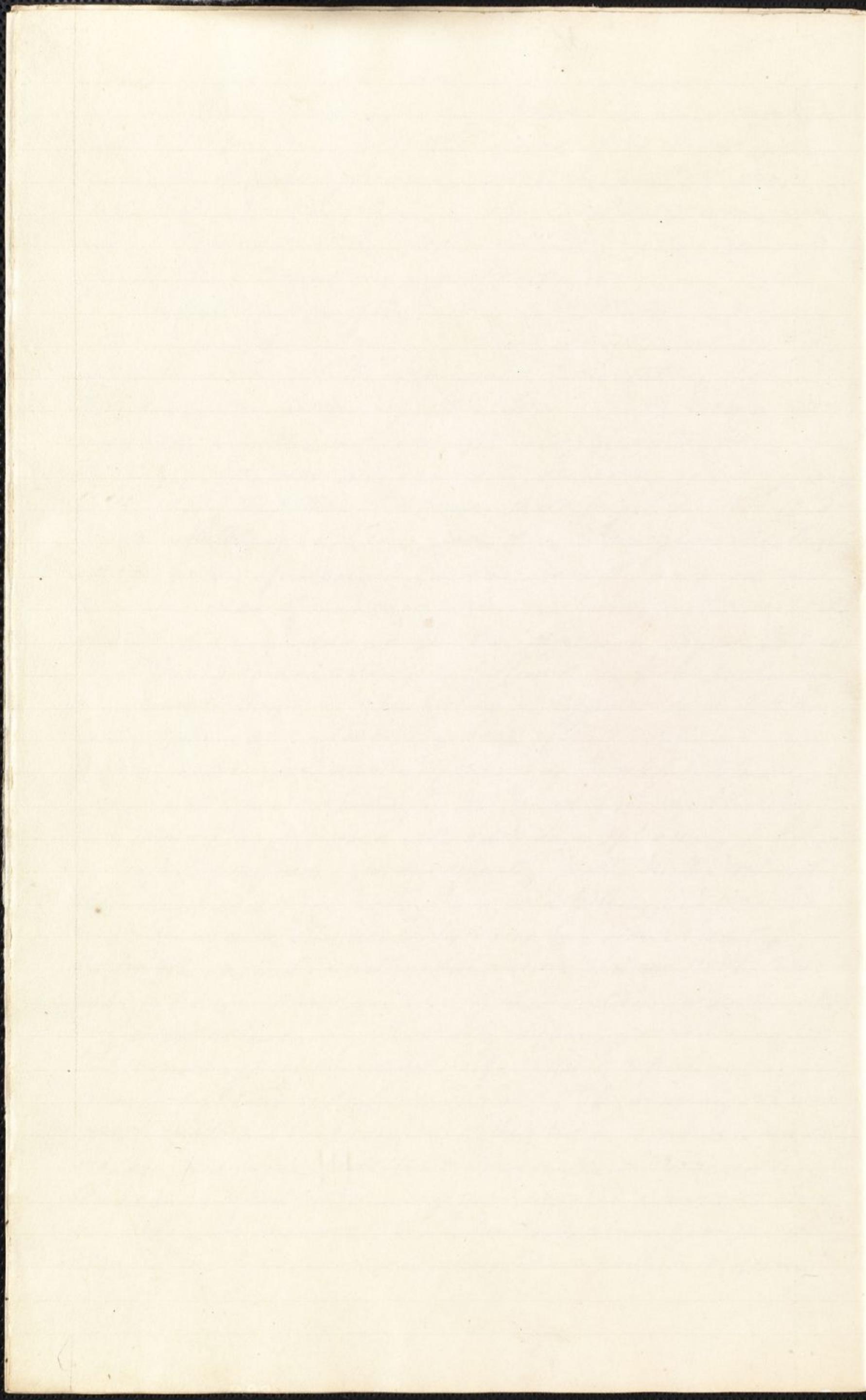
Nor is this the only mode of warming the quadrupeds of the frozen regions. Many of them, and probably all have the faculty of collecting, retaining and eliciting sparks of fire, or electricity, by a quick and inexplicable motion or jerk of their skins, or friction of their furs. We observed it in certain domesticated animals, as the cat, w<sup>c</sup> elicits sparks of fire in the coldest days of winter, and w<sup>c</sup> when we stroke their furs give a tingling sensation to our fingers. The colder the weather, the more is this apparent to sight and sense—and also during snowing. The

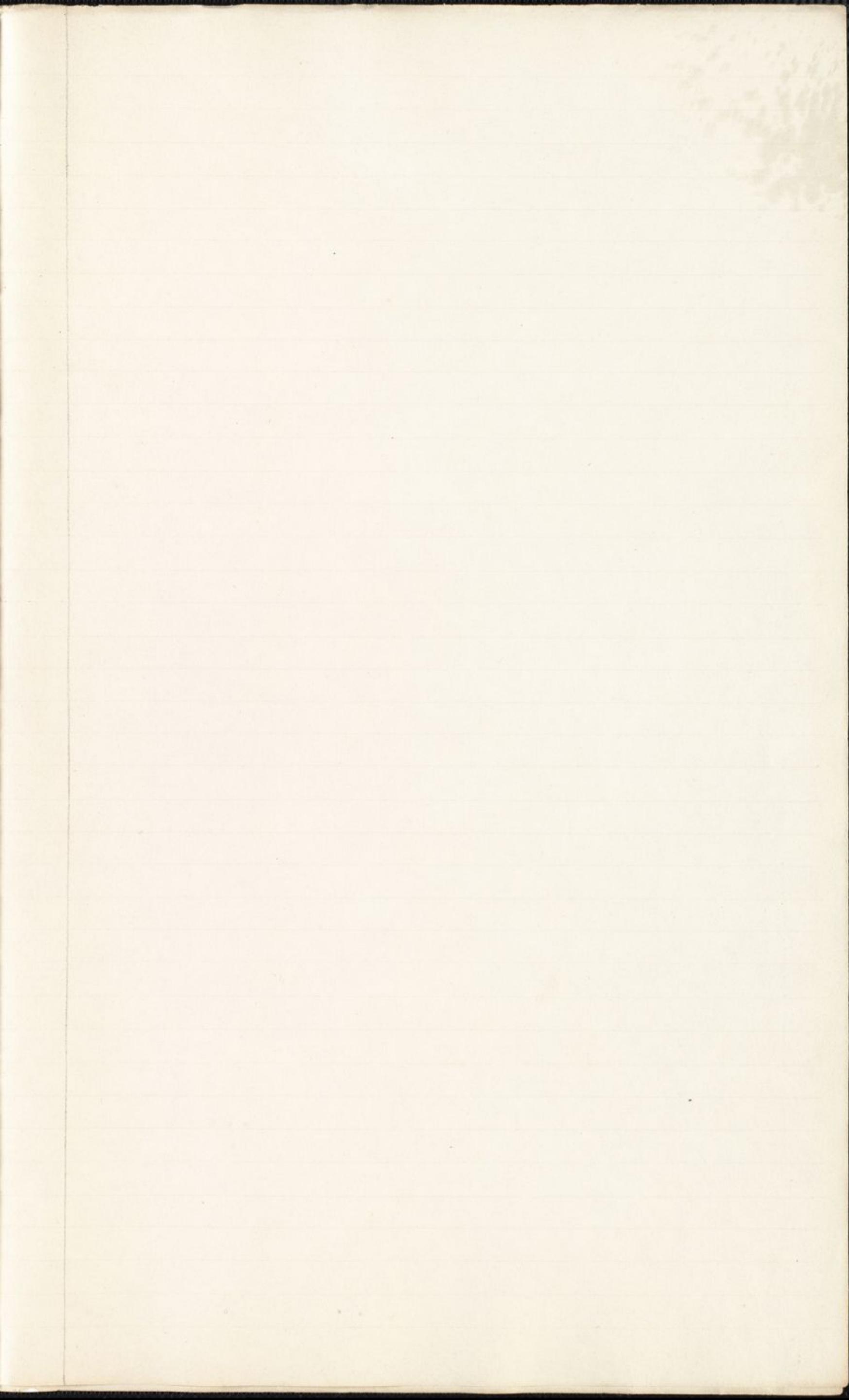
The brutal parent does not souse its young into cold water, to preserve them from disease and death, as we do our babies! by following the advice of doctors wiser than Nature. We see, however, that in young animals pure nature shudders under the operation, is grieved by it, and with tears and cries entreats you for <sup>are</sup> peace as much, almost as if the water was scalding hot. In this respect some children are treated worse than we treat our dogs, cat, and domesticated poultry. Even web-footed fowls that are destined to live a portion of their time in the waters fresh and salt are protected from the application of the water to their bare skins, w<sup>t</sup>. i<sup>s</sup> immediately covered with down w<sup>t</sup>. i<sup>s</sup> comparatively thin in summer, but thickens by degrees on the gradual approach of winter, and in the coldest part of it, beside a very warm jacket of down, have a firmer stock of larger feathers, pressed forcibly to their bodies, and oiled on the surface, and fortified in a remarkable manner, least dampness should have access to their skins. The genus of anas, after swimming and playing, and diving for food, will retire from the water and shake themselves so as to make each feather quiver, and then they anoint themselves from their oil-bag, and so far from being injured are regaled by the healthy operation. But how different is the cold bathing of a tender infant? We take a young child out of its warm bed, and not quite awake, and plunge into cold water, generally three times, hardly allowing it to breathe between the plunges— and, w<sup>t</sup>. i<sup>s</sup> still more dangerous, we take the little sufferer reeking with sweat, and dab it over with a cloth dipped in cold water from the pump with which it is washed in its most tender parts, under its armpits, and round its throat, and ears, and from its collar bones to its knees, the child screaming during the cruel operation as if scalded—and all for what?—to prevent its catching cold! The stupid Doctor who recommends it, quotes our savages of the forest as authority, and if he be a Scotchman adds weight to his advice by saying that it was the custom of Scotland and of Russia. The mucous membrane of the infant feels this outrage on humanity, and suffers accordingly, for nearly all the disorders of young children <sup>are</sup> in this sensitive membrane, the sentinel, our outgards of its precarious life. My first pre-

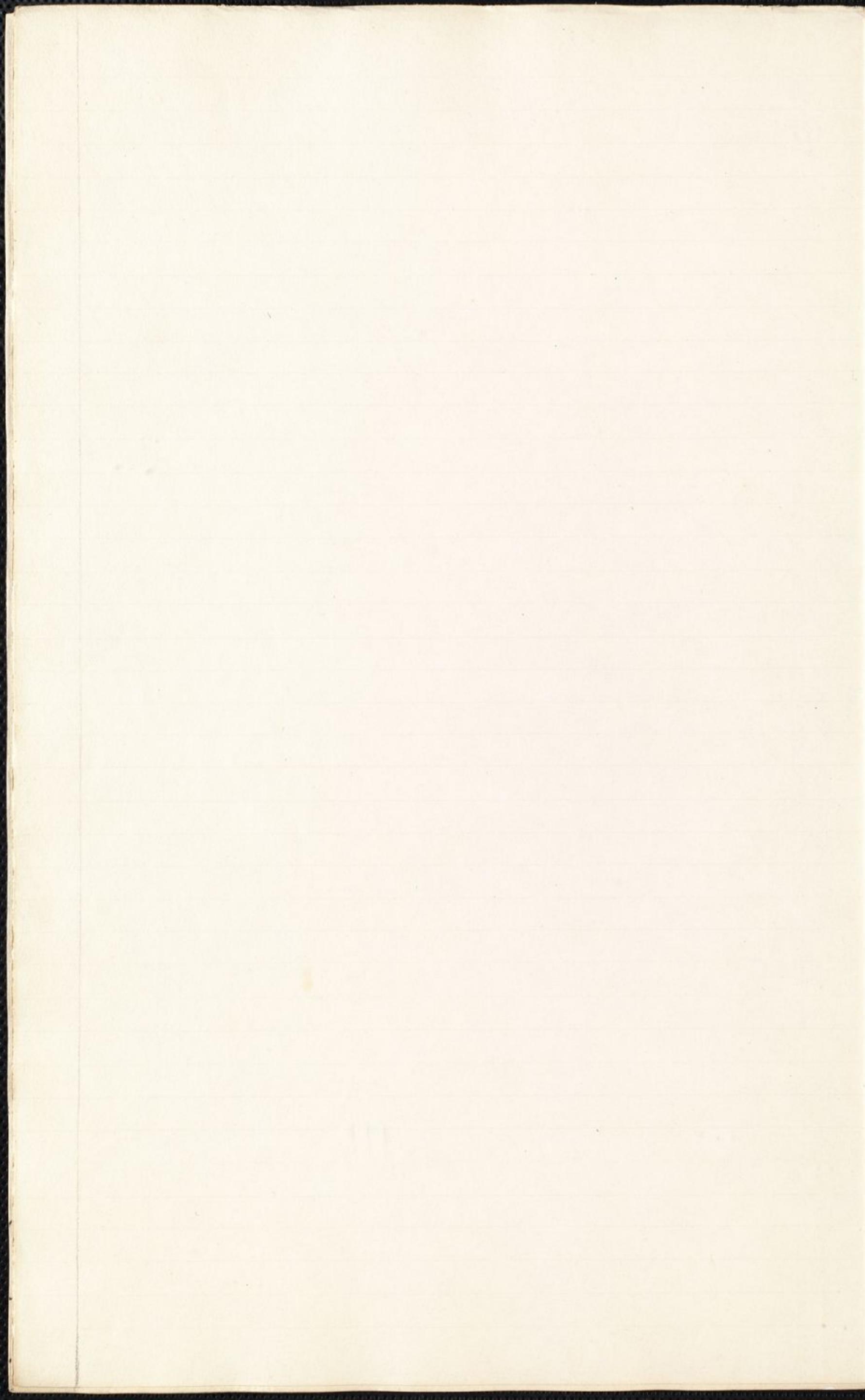
preceptor, before I went to Europe, was a Scotchman; when I returned to Scotland, after eight years absence, I enquired for the little boy, I was told that he died of the throat distemper, after suffering grievously with ribbed-heels, i.e frost-bitten feet. The steady Romans who shook'd the world were without Physicians at that period when they spread their conquest like a torrent over a great part of it.

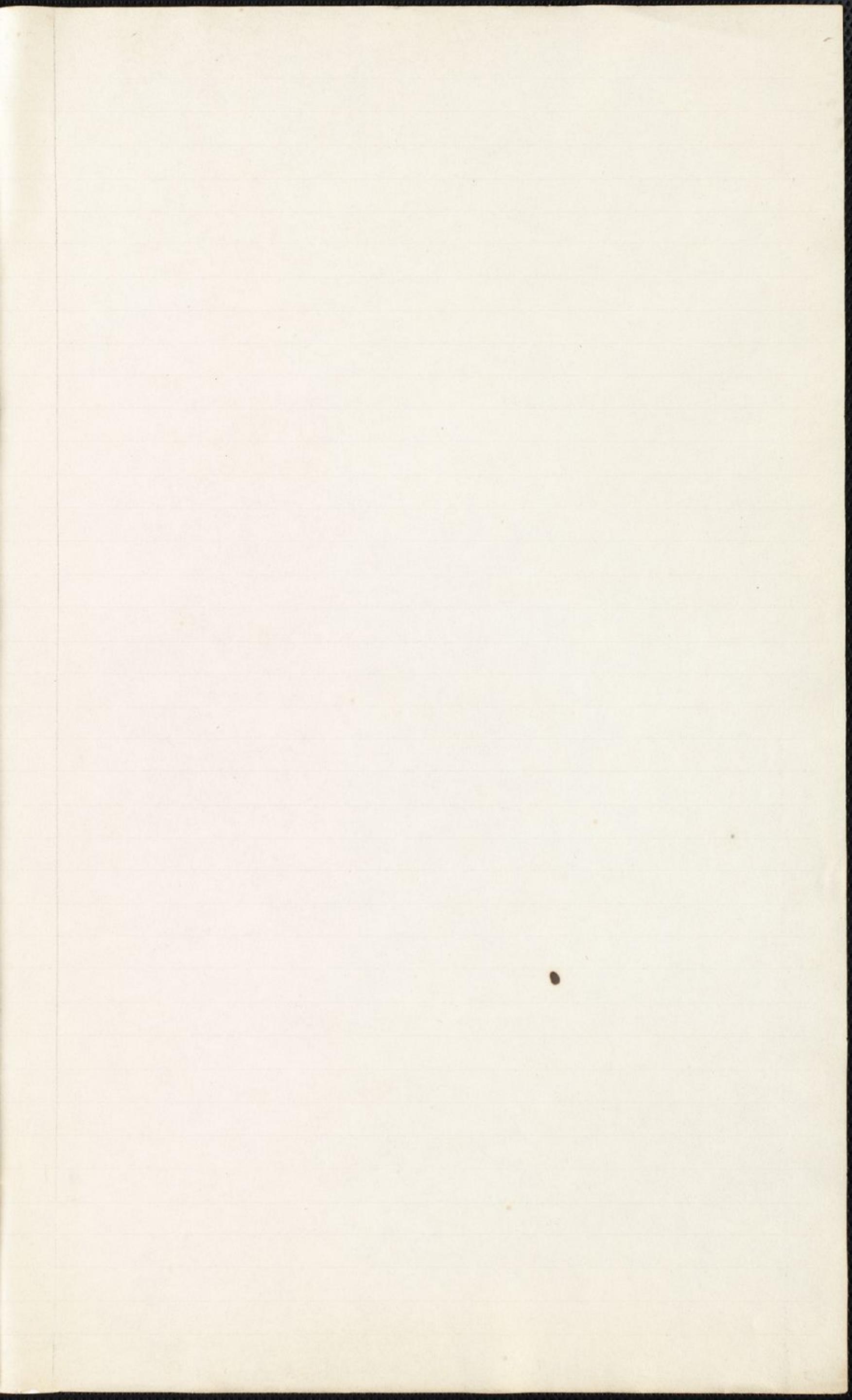
The infantile horrors of the Bathing-tub, I transcribe from my note-book, from I believe an English writer, or traveller without being able to name him — "The sobsing and lamentations I heard before daylight in the nursery, when I spent the Christmas at my brothers prevented me ever after sleeping in the house again. The thought of the poor little innocents, shivering and coughing at the edge of the bathing-tub I never shall forget" — Nor shall I, when inflicted upon children from three to six years old. I have seen this portion of a Spartan education regularly pursued under the absurd idea of making children so hardy as to resist the effects of cold and dampness. Our masters in Physic, the ancient Greeks studied nature, and followed her footsteps wherever they discovered the prints of her feet, and Hippocrates has left us his history of them and also his log book of the Mediterranean regions, he being a native of one of its beautiful Islands, Cos almost equal in beauty to that Island of the sun Rhodes — Here bathing may be used with advantage & pleasure; but for an English physician, more especially for the North Briton, to recommend and urge as they have cold bathing, and pounds of ice in fevers and other acute disorders borders on insanity. The British quote the customs & manners of our North American Indians to strengthen their Gothic doctrine, without making proper allowance for the widely differing manners and habits of savage and civilized life — without reflecting that we cannot adopt their customs without risk of life, especially with women & children — A child of one of their Indian squaws is made to endure that degree of cold to w<sup>c</sup> its miserable mother (according to our notions of comfort) is every year exposed. She will sit down on a cake of ice and suckle her infant with as much composure as one of our ladies in an easy chair with a cushion of down.

31.









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