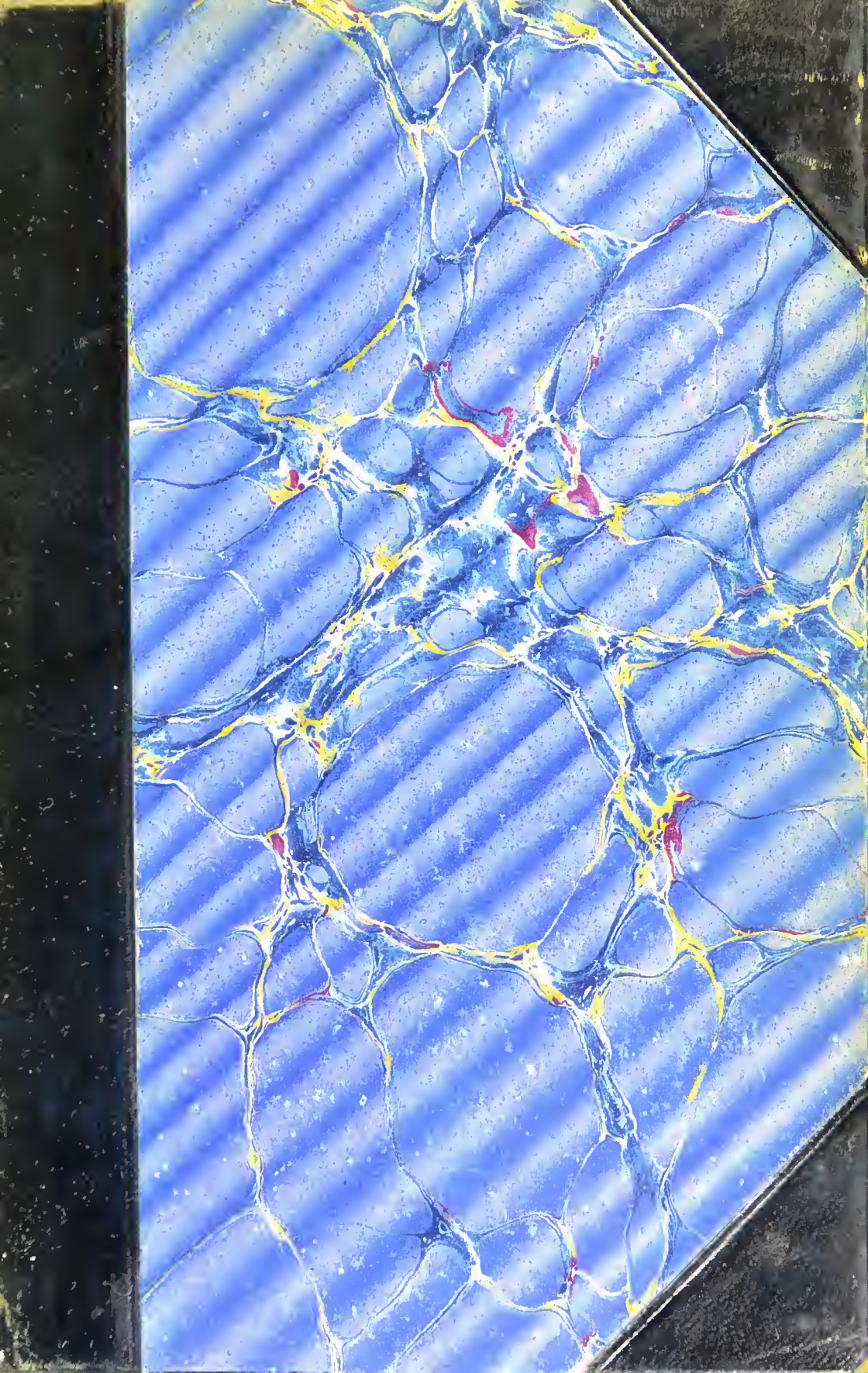

AN ACCOUNT

OF A

SUCCESSFUL METHOD OF TREATING

Diseases

OF

THE SPINE;

WITH

OBSERVATIONS,

AND

CASES IN ILLUSTRATION.

By THOMAS BAYNTON,

OF BRISTOL,

AUTHOR OF A TREATISE ON ULCERS.

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1813.

TO

DR. EDWARD JENNER, F. R. S.

&c. &c. &c.

DEAR SIR,

THE FRIENDSHIP YOU HAVE LONG SHEWN ME, ENCOURAGES ME TO TAKE THE LIBERTY OF OFFERING YOU THE FOLLOWING SHEETS. THEY WERE WRITTEN FOR THE PURPOSE OF PUBLISHING THE ADVANTAGES OF THE MODE OF TREATMENT THEREIN RECOMMENDED—THE MOTIVE I TRUST WILL BE AN EXCUSE FOR THEIR IMPERFECTIONS. THAT YOU MAY LONG CONTINUE TO ENJOY, IN HEALTH AND HAPPINESS, THE GRATITUDE OF THE WORLD FOR YOUR INESTIMABLE DISCOVERY, IS THE SINCERE WISH OF,

DEAR SIR,

YOUR MUCH OBLIGED SERVANT,

THOMAS BAYNTON.

BRUNSWICK-SQUARE,
Dec. 24, 1813.

PRACTICAL REMARKS

ON

DISEASES OF THE SPINE.

THERE are very few Diseases that occasion greater individual distress than the one which is about to be considered; it deprives the afflicted of the advantages of exercise, and the enjoyment of the locomotive faculty; it is painful in its progress, and fatal in its results.

Mr. POTT says that "when it befals an Adult it makes him completely miserable, by depriving him of all power of being

useful to himself or others; and that when an Infant becomes its victim, it renders all the care and tears, all the tenderness and anxiety of the fondest parent absolutely unavailing."

That the general methods of treating it too frequently fail to occasion either cures, or alleviation, the writings of the latest authors, as well as the experience of the most eminent practitioners, fully prove.

In many instances of terminations that have been deemed favourable, a deformed appearance, with diminution of stature, and the destruction of health, have occasioned the misfortune to become so distressingly apparent as to have outweighed the advantages of talents, connexions, and wealth.

Under the impression of these opinions, I feel myself justified in again appearing before the Public, for the purpose of communicating the information afforded by a considerable number of such cases, that were successfully treated.

My success has been obtained by the application of simple principles, which are generally admitted in the treatment of some other diseases, and may have been acted upon in this, though neither myself nor the public have received the information.

It is said by the Author above quoted, that, the majority of those who labour under this disease, are weak and delicate infants, or young children, that adults are by no means exempt from it, but that he has never seen it at an age above forty.

The annexed Cases will evince the correctness of those observations; a considerable proportion of them being properly classed under the appellation of young persons. It has only happened that three applications have been made by people nearly at the age of forty; two of whom are at present under the treatment that will be described. No recollection is had of any person with whom the disease commenced so late as the fortieth year.

"When it attacks a child who is old enough to have walked properly, its awkward and improper manner of using its legs, is the first circumstance which excites attention; and the incapacity of using them at all, which very soon follows, fixes that attention and alarms the friends. The account most frequently

given is, that for some time previous to the incapacity, the child had been observed to be languid, listless, and very soon tired: that he was unwilling to move much, or briskly, that he had been frequently observed to trip and stumble, although no impediment lay in his way: that when he moved hastily, or unguardedly, his legs would cross each other; by which, he was often, and suddenly, thrown down; that if he endeavoured to stand still, and upright, unsupported by another person, his knees would totter and bend under him, so that he could not with any precision or certainty, steadily direct either of his feet to any particular point; but that in attempting so to do, they would be suddenly and involuntarily brought across each other: that soon after this he com-

plained of frequent pains and twitchings in his thighs; particularly when in bed, and of an uneasy sensation at the pit of his stomach; that when he sat on a chair or a stool his legs were almost always found across each other, and drawn up under the seat; and that in a little time after these particulars had been observed he totally lost the power of walking. An Adult, in a case where no violence has been committed or received, will tell you that his first intimation was a sense of weakness in his backbone, accompanied with what he will call a heavy dull kind of pain, attended with such a lassitude as rendered a small degree of exercise fatiguing; that this was soon followed by an unusual sense of coldness in his thighs, not accountable from the weather,

and a palpable diminution of their sensibility; that in a little time more his limbs were frequently convulsed by involuntary twitchings, particularly troublesome in the night; that soon after this he not only became incapable of walking, but that his power of retaining or discharging his urine and fœces were considerably impaired.*"

These interesting quotations recite so fully, and accurately, the symptoms generally observed in this disease, as to render any additional description unnecessary; and justify their insertion in preference to any less perfect enumeration of them by my own pen. The sensible or more obvious signs of the disease, are a projection, or

* Mr. Pott's Treatise.

standing out behind, of one or more of the spinal processes beyond the straight line of the spinal column, and a considerable degree of tenderness discoverable on the application of pressure.

That effects so distressing should be occasioned by a disease that softens the bodies of the vertebræ, and renders them unable to sustain the weight of the parts above, will become apparent, when it is recollected that in a healthy state the body of each vertebra is firm, for supporting that weight, and hollow for the purpose of containing the most sensible and important part of the nervous system—the spinal marrow—a portion of the brain.*

The learned Author, Mr. Pott, whose

* Mr. John Bell.

opinions have already been so fully quoted, and whose opportunities of investigating the nature and symptoms of this disease, were more extensive than those of most other surgeons, was convinced by his attendance on the living, and his examinations of the bodies of those whom it had destroyed, that it was connected with, and generally occasioned by a scrophulous habit.

The enlarged state of the submaxillary and other glands; the tumid state of the abdomen; and the general appearance of the greater number of such persons, would induce an assent to the probable truth of such a conclusion. And when it is shewn, by examinations after death, that almost all the glands are found in an enlarged, diseased, and suppurated state; and that

cysts are also found, connected with the diseased vertebræ, that contain curdly, purulent, and other matter, of unequal consistence, it must be universally admitted that the phenomena of scrophula are frequently connected with diseases of the spinal column.

In the observations which have been made by Mr. Pott on the means of curing this disease, he objects in the strongest terms to the use of any kind of machinery, and says "that when curvatures are noticed, recourse is immediately had to back boards, collars, steel boddice, swings, screw chairs, and other pieces of machinery, but all to no purpose; the patient becomes daily more and more helpless, and unhealthy; languishes for more or less time, and at last dies in

an emaclated state, from an hectic; or by a drain from an abscess formed within the body. That all machinery, from the most simple to the most complex, are calculated to remove and obviate what does not exist; and that they who have had patience and fortitude to bear the use of them to such a degree as to affect the parts concerned, have always found increase of pain, and fever, and an exasperation of all their bad symptoms; and that he has known more than one instance in which the attempt has proved fatal:" but, he says, "that the discharge occasioned by issues produces in due time a cessation of the erosions of the bones; and that this is followed by an incarnation, by means of which the bodies of the vertebræ which had been the seat of

the disease, coalesce, and unite with each other, forming a kind of anchylosis."

His investigations had shewn him that the curvatures which occasion projections or protrusions of the spinous processes, and that are from within outwards, were always occasioned by a destruction of one or more of the bodies of the vertebræ, and that without such destruction no curvatures of this kind could possibly occur.

He has said that, "when two or more vertebræ are affected, forming a large curve, however perfect the success may be with regard to the restoration of health, and limbs, yet the curvature will and must remain, in consequence of the union of the bones with each other: and that when from extent or degree, or inveteracy of the caries,

the issues are found to be unequal to the wished for effect, the general complaints receive no amendment, but increase until the patient sinks under them"—and in conclusion, he earnestly recommends the occasioning of drains by caustic issues, as well for the prevention as the curing of such diseases.

Another eminent Surgeon, to whom the world has been indebted for many scientific improvements, has also made this disease the subject of a publication; and when his own extensive practice, as well as the opportunities afforded him by the public and private practice of Mr. Pott is considered, he will justly be deemed another high authority.

The opinions of these Gentlemen respecting its causes, symptoms, progress, and

termination, generally coincide; but on the important subject of its treatment, a very considerable difference of opinion will be discovered; the use of machinery having been as strongly recommended by Sir JAS. EARLE, as it has been objected to by Mr. POTT: this will be shewn by the following quotations, and many other passages of Sir JAMES EARLE'S work.

"If a machine be contrived to elevate the head, and support the thorax, passing down the spine and strengthening it as a splint does a broken limb; resting on the pelvis as its basis, and with a contrivance to give such gradual and permanent extension as the weak parts will bear, without injury; and to be continued until by a deposition of osseous matter the yield-

ing vertebræ become firm and compact bones, I am clearly of opinion that much good from it may be derived" ; and again, speaking of an instrument, he says, " but what I principally wish by the description of it on the present occasion, is to shew that it is safe and useful, and to endeavour to set aside the disinclination which I perceive in many practitioners, as well as in the writings of Mr. Pott, to admit of its use or assistance in cases of curvature attended with caries; and further I shall endeavour to make it apparent, that in some of these cases such a contrivance is not only frequently useful, but often absolutely necessary."

This very striking difference of opinion, between such authorities, on so important a point as the treatment of the disease,

would make it interesting, if it were not absolutely necessary, to shew what additional advantages had been obtained for this class of the afflicted, by conjoining the use of machinery, for the purpose of preventing pressure, as recommended by Sir James Earle, with the use of drains occasioned by caustics, setons, &c. for the purpose of arresting the progress of disease in the bones, as advised by Mr. Pott.

The first of these gentlemen has not only liberally invited further discussion, and asserted that the more respectable an author is the more his opinions should be scrutinized; if they clash with well founded subsequent observations, but has also given the cases of four persons for whom the united advantages of machinery and caustic

issues were conjoined, under his direction. It may therefore now be ascertained, by comparing the cases which display those combined effects with many other cases that were differently treated, whether greater advantages may not in future be expected from the use of means that are more simple, more reasonable, and much more agreeable.

It has been already said that diseases of the vertebræ, which, in consequence of the softness of their bodies occasion a protrusion of their spinal processes, and a compression of the medulla, must be generally allowed to be connected with the disease that is denominated scrophula. But as the term scrophula conveys no precise meaning respecting the nature of that disease,

and has only a remote allusion to one of its symptoms,* it may not be improper in this place to observe, that the theory which teaches that a debilitated and torpid state of the arteries, veins, absorbent glands, and lymphatic vessels, are the causes of scrophula, will prove more satisfactory, and afford a better explanation of the occasion of many of its symptoms, than most of the opinions which have been entertained. It will also, it is believed, conduct the practitioner to a more rational, and successful mode of treating it.

It has been observed by Mr. Cruik-

* It has been supposed to resemble the measles of swine, and in consequence thereof, to have derived its appellation from scrofa, an old sow.

SHANK, in his valuable history of the absorbents, "that in scrophulous inflammation of the lymphatic glands, under the skin, not only the integuments, but the glands themselves, have frequently a blue or purple colour; this is owing to the slow motion of the blood both in the arteries and veins, or perhaps even to its stagnation in those parts; peculiar to this kind of inflammation." Dr. DARWIN has also said in the Zoonomia, "that when the glandular part of a lymphatic vessel becomes torpid, the fluid absorbed by its mouth stagnates, and forms a tumour in the gland, and that this disease is called the scrophula."

The mesenteric glands are generally found in a diseased state in persons who have laboured under the symptoms of scrophula,

and it is known that Children whose mesenteric glands have been so diseased as to prevent the natural supply of chyle from entering the thoracic duct, have been peculiarly liable to diseases of the spine, and to that flattening of the ribs at their sides which occasions them to lose their arched form, to project anteriorly, and to induce a deformity of the chest that has been, not unaptly, compared to a chicken's breast.

These effects may be occasioned either by a deficient deposition of ossific matter, from the secreting extremities of languid arteries; or by a deficient absorption of the softer constituents of bones, by diseased absorbent vessels; or by the combined effects of each of those, and perhaps of other causes.

When the connexions, actions, and dependencies of the arterial, venous, and absorbent systems upon each other, are duly considered, it will be difficult to imagine that any material imperfection can exist in the general condition of either of those systems, without the production of an effect more or less detrimental to the functions and structure of each of the other of those systems.

Now if a debilitated and torpid state of the circulating and absorbent systems, be the cause of that morbid softness of the bones which so often occurs in young persons, and occasions curvatures of the spine, and many of those other diseases of the joints and bones, which happen so frequently in such conditions of those

systems; the means of cure here recommended will, it is expected, appear to be as probable, as their effects have been found satisfactory.

"The formation of bone is a process of a truly animal nature, it is not the inorganic concrete which it was once supposed; but it is a regularly organized part, whose form subsists from the first; and which is perfected by its secreting arteries; and balanced as in every secretion by the absorbents of the part. It lives, grows, and feels, it is liable to accidents, and is subject to diseases. It is a process which at first appears so rapid that we should expect it to be soon complete; but in the end it becomes a slow and difficult process; it is not completed in the human

body till after the twentieth year. It is forwarded by health and strength, it is retarded by weakness and disease."*

These circumstances sufficiently indicate the reason why curvatures of the spine generally occur before the process of ossification is completed; and why such diseases generally affect persons whose circulating and absorbent systems are in a weakened state. They also shew why those who have had the misfortune to fall into such diseased states, cannot be expected to recover, while the disadvantages that occasioned, and preceded the appearance of the curvatures, continue to influence the circulating and absorbent systems.

* Mr. John Bell.

Previously to the appearance of spinal curvatures, the arteries have failed to secrete a sufficient supply of ossific matter to afford healthy consistency to the bones, and at the same time it is rendered probable by the symptoms that the absorbents have failed to absorb the due proportion of soft materials. These failures in the circle of the actions of nutrition, at length induce a morbid softness in the bony, and intervertebral substances of the spinal column, which renders it unable to bear the weight it has to sustain, and endangers the safety of the sensible nervous parts which it incloses.

The softened bodies of the vertebræ yield to the pressure of the parts above; inflammation, and ulceration, occur as a con-

sequence of compression; and the nerves of the parts below, suffer so much from the same cause, compression, as to occasion in those parts, namely the intestines, bladder, and limbs, a loss of sensibility, and of the power of action.

In such very distressing circumstances it would perhaps be impossible to account satisfactorily for the accomplishment of cures by the effects of caustic issues, either alone or in combination with the use of machinery, and, though many cures have been ascribed by Mr. Pott to the effects of drains alone, which were certainly accomplished while drains were in use, there are forcible reasons for believing that many of those cures are ascribable to causes that

were more efficient, though they were deemed at the time so unimportant, as to have been passed over without even the slightest recommendation.

Could it have been expected that any persons, whose circulating and absorbent systems were not sufficiently healthy to preserve a proper consistency in the bony parts of the system, when general circumstances were favourable, would recover by the mere assistance of caustic issues, or by the mere removal of pressure, or even by the combined effects of each of those means, when the bones were in a state of ulceration, and the general health destroyed? surely it could not; as the effects of drains have no known tendency to improve the health of

the vascular systems; or the removal of pressure, to obviate any of the *causes* of this disease.

It could not be expected that the deposition of osseous matters, and their consolidation, the most important processes in the restoration of bone, should be properly performed while the body was erect, and in action; it would not happen in a simple fracture of the bones of the leg, in the most healthy person.

What then would reason appear to suggest? would it not instruct us to afford to a bone that had sustained a greater injury, and that was connected with impaired vessels, (the organs of reparation) equal advantages to those required for the reparation of a healthy bone, that had been

broken by an accident? it certainly would; and would shew, that those advantages should, if possible, be so extended as to reach the difficulties of such unfavorable cases. It would also shew that the means of restoration ought not to be interrupted till the cures of such cases were perfectly accomplished; lest the destruction of the newly formed parts should be occasioned by actions that were disproportioned to their vitality.

This happened to ulcers of the legs that had been healed by resting, if the resting process were intermitted, or discontinued, at any time before the newly healed parts had acquired a sufficiency of health and strength.

That a system of resting in the horizon-

tal position, regulated by scientific principles, will accomplish the cures of diseases of the spine after the failure of drains, and machinery, steadily continued a considerable number of years under the direction of skilful surgeons, will be hereafter proved.

Fortunately for this class of the afflicted, it will appear that, the means which are best calculated to prevent, or remove the causes of their diseases; are also the best calculated, and the most effectual, for the alleviation of their symptoms.

Resting, in the horizontal position, is as effectual in *improving circulation, favouring the deposition of bone*, and *promoting absorption*, as it is in preventing pressure, and allaying pain.

When a healthy bone is broken, it can

not be repaired without absolute rest; and when a deposition of lymph occasions the swelling of a limb, its absorption is promoted, and the swelling removed, by a horizontal position; on the contrary, the fractured bone remains disunited, if it be kept in a state of action; and the limb continues swollen, when the advantages of recumbency, or other means, (inapplicable in diseases of the spine,) are not had recourse to."*

The analogy between diseases of the bones, that occur as a consequence of a diseased state of the vascular systems, as spinal affections; and those diseases which are the consequence of injuries, as frac-

* Bandages, &c.

tures, is too clear to escape observation; and the means of restoration are precisely the same in each case.

If it be asked then, why a mode of treatment, arising out of such obvious conclusions, has not been earlier resorted to, it may be replied, because that one of the most distinguished surgeons of this country, Mr. Pott, published a treatise on this disease, for the express purpose of recommending another mode of treatment, namely, caustic issues, without having adverted to the advantages which he probably unconsciously derived from the use of these means. It appears from the work of Sir James Earle, who witnessed Mr. Pott's practice, and who has commented on his writings, that he was in the habit of confining his patients to

their beds, during the greatest part of the cure.

Another equally probable reason, for the neglect of these advantages in the treatment of this disease, may be found in the objections that have been made to this practice by Sir JAMES EARLE. Who in recommending the use of machinery for the removal of pressure, says, "from repeated observation, I am so convinced, and conceive the benefit likely to result from mechanic assistance so self evident, that it would seem unnecessary to advance any thing further in prospect of convincing others, had not the objections to it originated in an authority so generally respected. I shall therefore continue my observations, and as a proof how necessary it is that by

some means or other the pressure of the parts above must be in many cases taken off while the cure is perfecting, and to shew that Mr. Pott himself was convinced of the necessity of it, though perhaps it did not appear to him exactly in the same point of view, *I must remark that in many cases of curved spines* which Mr. Pott attended, *he thought it necessary to confine his patients to bed, or to a horizontal situation during the greatest part of the cure, as they could not bear to remain in an upright position.* I NEED NOT OBSERVE HOW IRKSOME THIS MUST BE, HOW IT MUST TEND TO RELAX, AND WEAKEN THE PATIENT, AND CONSEQUENTLY TO RETARD THE CURE; SEEING IT ONLY IN THIS LIGHT, IT MUST BE ACKNOWLEDGED THAT ANY MEANS WHICH

WOULD RENDER UNNECESSARY THIS SEVERE AND UNHEALTHY PROCESS MUST BE DESIRABLE AND ADVANTAGEOUS."*

This quotation incontestibly proves that, Mr. POTT actually kept his worst cases confined to their beds, in the horizontal position, during the greatest part of the cure. It also proves that, his reason for so doing was, they could not bear to remain in an upright position.

Thus two of the strongest additional arguments, for the general adoption of the practice, are thereby furnished—*It constituted a part of the treatment whereby Mr.* POTT'S *cures were accomplished. And many of his patients could not have borne an upright position.*

* Sir JAMES EARLE'S Treatise, page 29.

Sir JAMES EARLE has thus shewn by his account of the practice of Mr. POTT, that drains were not sufficiently efficacious to cure this disease without the removal of the superincumbent pressure; and, it has been shewn by Mr. POTT's own writings, that he thought all machinery, which could be used for the removal of that pressure, would prove in every instance, rather the occasion of injury than of advantage.

Does it not then appear, from their united testimony, as well as the experience of many eminent members of the profession, that other means were absolutely necessary, for its successful treatment? I believe those other means have been now practically ascertained, and that their general efficacy will be speedily established.

Experience certainly proves that long confinement in bed, when accompanied with the disadvantages of an over heated chamber, an excess of bed clothes, or the continuance of perspiration, is very debilitating.

But if such patients be kept in a temperate atmosphere, in a position that prevents pain, or uneasiness, it will probably appear to others, as it does to myself, that as no increased, nor unnecessary expenditure is in any way occasioned, the remaining strength of such persons, will be more effectually preserved by rest, and quietness, in the horizontal position, than by any other means.

This conclusion will appear undeniable, when it is recollected that the power which is acquired by muscular action, cannot be attained, or preserved, by persons

whose muscles have been rendered disobedient to the will, till the disease which occasioned that disobedience be removed.

The risk of those excoriations, which are sometimes occasioned, when the distressed sufferers are rendered unable by the severity of their diseases to vary their position, can be prevented; and all other reasonable objections to the horizontal position can be removed, by simple expedients.

It can be shewn also that together with the attainment of ease, and progressive improvement, the afflicted are not merely content, but generally cheerful, and happy, during the progress of their cures.

The first of the annexed Cases will shew that in the earlier application of these

principles to a practical test, upwards of fifteen years since; the observance of strict, undeviating rest, in the horizontal position, was combined with the use of drains, occasioned by setons.

Those of later occurrence will, I believe, afford undeniable proof, that drains are not generally, if they are ever, necessary, for the curing of such diseases.

If so, how much of that suffering, which was experienced in their treatment, by the making, and dressing of setons, the application of caustics, and the lying on open ulcers, of considerable extent, filled with pease, beans, or other hard bodies, will be prevented, by the adoption of this plan of treatment.

How much more regularly may the pro-

cess of ossification be expected to proceed; and how much more early may it be hoped to be completed, when no interruptions are occasioned, by that shifting, which was so often necessary to avoid the pain of com pression; and that turning, which was daily requisite to bring the parts into view, at the time of renewing the applications.

But as practical facts are more satisfactory than the most plausible speculations, numerous proofs of the efficacy of this practice, in removing deformity, and accomplishing cures, will be adduced at the close of this treatise.

The opportunity of making a fair, and conclusive estimate, of the relative advantage of the proposed improvement, will be also afforded to the members of the medical

profession; as the few instances of failure that have occurred, will accompany the statements of success.

By the adoption of this practice the progress of inflammation will be first arrested, the nutrition of softened bones afterwards accomplished; and that deformity which is occasioned by the falling in of the bodies of the vertebræ, will be always removed, if a previous junction of those bones, in the progress of the disease, has not rendered it impossible.

But to obtain these great, and most important advantages, undeviating, absolute rest, continued without interruption, till the cures are completed, will be proved to be indispensably necessary.

The following Cases will clearly shew,

that after very patient trials of partial resting, conjoined with the use of drains, and machinery, without any success, the most hopeless cases have been cured by uninterrupted rest alone.

This undeviating, absolute rest, is however only necessary when a projection of one, or more, of the spinal processes, indicates the existence of caries in one, or more, of the bodies of the vertebræ; or when, a tenderness of the immediately contiguous soft parts, indicates that the bodies of the vertebræ, the interstitial substances, or the ligamentous parts, are in an inflamed state.

It has been already shewn that, in the cases of caries, the state of the general health will be found impaired; and that the functions of all the parts, below the

diseased, will be also found frequently affected, in a greater or less degree; especially those of the lower limbs.

Lateral Curvatures of the spine, do not generally require the same methods of treatment as the above diseases. No inflammatory action is evinced by a sense of tenderness. The spinal processes do not, by any projection, indicate that the *bodies* of the vertebræ are in a diseased state. The health is not, *necessarily*, impaired; the functions of the bowels, bladder, and limbs, always remain perfect, and under the controul of the will.

These curvatures will generally be found inclining to the right side; accompanied by a projection of the right scapula; a fulness of the muscles of that side; and sometimes

of the muscles of the right hip, and buttock.

They are, in most instances, a consequence of the undue power, which is acquired by the more general use of the right arm, and of those other muscles, in the performance of the voluntary actions.

In the earlier stages of their occurrence, they may be speedily relieved, by means which increase the muscular powers of the opposite side; and diminish the power of the muscles of the affected side.

Keeping the right arm at rest, in a sling, and constantly using the left, for every purpose that may be required, will generally in a few weeks, occasion the disappearance of such slight lateral curvatures; and almost always, of that projection of the

right scapula, and that muscular fulness of the right side, which, when observed, occasion to the minds of relations, and friends, the most painful apprehensions.

But when the curvature is very considerable, and when in consequence of oblique pressure,* or other causes, the lumbar vertebræ incline toward the left side, occasioning the curvature to resemble the letter S reversed; then it will be necessary to combine the advantage of recumbency, on a

* A slender stick, whilst upright, will support a considerable weight, which when bent will sink under it. It is the same with the spine; when erect it is able to bear the weight of every part of the body above, but when curved, its strength is diminished in proportion as it deviates from the perpendicular.

Sir JAMES EARLE, p. 8.

sofa, mattress, or carpet, a few hours in the middle of the day, till relief be obtained, with the means above mentioned.

Growth will be thereby promoted, at the same time that undue muscular action will be prevented; and it may be expected, that within a reasonable period, the curvature will be lessened; though it does not often happen that curvatures with two inflections, are entirely removed by any means. In some instances, the Muriate of Lime, and Cinchona, were occasionally exhibited, for the improvement of health. But as many of the cures were accomplished without the use of any internal medicine, it is believed that the advantages of resting will frequently render the use of medicines unnecessary.

In cases, however, that are strongly marked with the indications of scrophula, by swellings of the Columna Nasi, the upper lip, and the submaxillary glands, and also by languid eruptions about the mouth, and nostrils, it will appear certain that a liberal supply of animal food, must be also accompanied by the use of medicines of a tonic class, which, by promoting absorption, prevent waste; and thereby recruit strength.

The Muriate of Lime has been highly commended by many practitioners for such purposes. It was first recommended, I believe, by Mons. Fourcroy, about eighteen or twenty years since; probably from theoretical views, as it contains the solid constituent of bone in loose combination with the muriatic acid. It was afterwards as

strongly recommended to the attention of German practitioners by the learned Professor HUFELAND, of Jena; and it was more particularly introduced to the notice of English practitioners by the late very ingenious Dr. BEDDOES, in his treatise on the management of the Consumptive.

A considerable difference of opinion is however still entertained respecting its properties as a medicine; by many it is considered as almost specifical in the curing of scrophulous diseases; whilst by others, among whom are Professors RUSSELL, and THOMPSON, it is held in very slight estimation.

These differences of opinion must continue to appear irreconcileable, under the too general view of its possessing either a

specifical, or an *inert* character, *in every stage* of that disease. But, if only the same degree of latitude, and of limitation, be allowed to its effects, that are granted to the effects of almost all other medicines, I am inclined to believe that it will be found very useful in some of the stages of scrophula.

A Gentleman who had tried it fully and fairly in the earlier stages of his disease, during a period of comparative health, and strength, without advantage, was preserved by its use in the last stage, under the most hopeless circumstances, after the failure of every other known remedy. The event of that case, as well as of many others, in the same stages of that disease, which could be improved at will by the use of

the medicine, and that failed to improve if it were omitted, leaves no doubt in my mind, that generally in the latter stages, and in the more chronic forms of that disease, it will prove eminently beneficial.

In the cases of the sickly poor, whose countenances denote to every spectator, by the signs already mentioned, the state of debility to which they are reduced, it will not often disappoint the hope of the practitioner.

This medicine will be occasionally met with of different degrees of strength, in consequence of being prepared from formulæ that differ. Those who would give it a fair trial should prepare it themselves, by saturating the undiluted muriatic acid with prepared chalk; which can be per-

formed in a common bason, as easily as the saturation of lemon juice with an alkali. One dram of the clear liquid may be taken three times a day in a draught of water, or new milk, by an Adult; and gradually increased to three or four drams with the most perfect safety, if the obstinacy of the disease should render it necessary.

Topical bleeding, a remedy so generally useful and necessary, in almost every other disease, that is accompanied with inflammatory action, has not been requisite in any of these cases.

The time that may be required for the completion of such cures, will depend on various circumstances; as the age of the patients, the state of their general health,

and the degree of their diseases. A probable rule of general guidance on that head may be obtained from the circumstances observed, and recorded, in the accounts of the cures.

In the slightest cases, it will be necessary to continue the recumbency five or six weeks, after the removal of all tenderness. —In the more severe cases, where a projection of the spinal processes shews that a disorganization of the bodies of the vertebræ has been occasioned, it will be prudent to extend the resting process, as long as two or three months, after the disappearance of every inconvenient symptom. And in all cases, it will be advisable to continue to observe the recumbent position in as great a degree as can be made conve-

nient, a considerable time after the accomplishment of the cures.

Further experience may probably shew that it may not be necessary to continue it so long as is now supposed, but at present it may be deemed prudent to continue the practice a little longer than may be absolutely requisite, rather than incur the risk of relapse, by subjecting the newly restored parts to pressure too early. The occurrence of such a misfortune, would make it necessary to repeat the resting process, with as much strictness as had been required in the first instance.

That this practice will sometimes prevent the formation of those abscesses in the loins, which were occasioned by diseased vertebræ, will perhaps be thought

probable, when its effects in removing pressure, and its consequent irritation are considered.*

The propriety of applying these principles in conjunction with other means for the treatment of the hip-joint disease, will be shewn in the successful treatment of two or three such cases. But, though the application of this practice to diseases of the spine, was occasioned in the first instance, by its successful application in the treatment of a diseased hip-joint, I have practical reasons for doubting, whether the cure of the hip-joint disease can safely be entrusted to the effects of rest alone.

* "Confinement to bed and perfect quietude should be enjoined."

Mr. ABERNETHY on Lumbar Abscess.

If more extended experience should confirm these doubts, it will not appear remarkable; as diseases of the hip-joint, though generally occasioned by the same causes, and occurring very frequently at the same time, in the same persons, with diseases of the spine, differ very materially in their symptoms, and their progress, from that disease.

In spinal diseases, the *bodies* of the vertebræ are generally first affected, and the contiguous parts suffer secondarily; whereas, in diseases of the hip-joint, there is reason to believe that circumstances are frequently reversed; and that the soft *parts* are often the first that suffer.

But as the articulating surfaces of the hip-joint generally become affected in the

progress of the disease,* a position that effectually prevents pressure, and affords all the other enumerated advantages, will appear to be as necessary an auxiliary, in the treatment of the hip-joint disease, as it is a principal agent in the treatment of diseases of the spine.

And if the expectation of rendering such cures more generally certain, be well founded; it is believed, for the reasons already explained, that the resting process must not be interrupted, till the cures are completed.

Will it be thought unreasonable to indulge a hope that some of those deaths which generally succeed to accidental in-

* See an account of two dissections, in the first edition of Mr. FORD's book.

juries of the spine, occasioning paralysis of the bowels, bladder, and limbs, and that destroy life in a few days, by inflammation of the medulla spinalis, may be prevented by a judicious, and skilful combination of these means, with copious bleedings, &c.

It is hoped, that such an expectation will not be deemed too sanguine. A Gentleman is, at the present time, under my care, who lost the use of his limbs, in consequence of an injury of the spine, occasioned by a fall when hunting, some years since. He very distinctly recollects, that after his accident, when his symptoms, from their severity, confined him to the recumbent position, he obtained advantages that enabled him to rise, and move about with

the aid of crutches; and that from the time of his rising, he failed to receive any further advantage, from the use of machinery, or any of the other means that were afterwards had recourse to.

The event of this case affords as much instruction and encouragement, as could be expected from the result of any single case; and occasions regret that the advantages of *absolute* resting, in the horizontal position, together with copious bleedings, were not extended as strictly as they ought to have been, to some of the victims of such injuries, that have come under my occasional observation.

The prevention of inflammation in such cases of accident, should be the first, and most important object of the surgeon's at-

tention. It is certain that the reparation of the injury which the medulla, bones, or ligaments may have sustained, will be more effectually accomplished, by the undeviating rest that is necessary to prevent the occurence, or increase of inflammation, than by any other means.

Perhaps it may be said that the effects of such accidents necessarily occasion the confinement of all such patients to their beds; it is however feared that the danger of injuring the medulla by any motion, is so great in such cases, as to render it probable that the absolute state of immobility, which is required, cannot be attained on common beds, which by their yielding softness occasion frequent variations of position; and as frequently a necessity of

re-placing the patients in the situation from which they had been removed.

In the preceding attempts to shew, that a more probable method of relieving curvatures of the spine might have been inferred, from a train of reasoning, founded on acknowledged facts, connected with the history of those diseases, I have very freely, and fully quoted the opinions of my predecessors in this inquiry.

With equal freedom I have ventured to express my dissent, where later experience has occasioned me to believe my conclusions more correct; but as I have been influenced by no other motive than the desire to promulgate useful truths, and have expressed the difference of my opinion in terms as respectful, as my sentiments have

ever been towards those with whom I may have been found to dissent; it is hoped that the free expression of those opinions may not merely be excused, but entitled to approbation.

The person who writes last on any subject is generally indebted to those who have preceded him in the inquiry. He has the advantage of their advances to make his observations from; and if he does not discover something new, or see more clearly the discoveries of his predecessors, he has no apology for troubling the public with another book.

I am aware that the practice of *occasional* resting has been frequently recommended by various authors, in conjunction with other means, in the treatment of dis-

eases of the hip-joint, and other affections of the joints; but with the exception of a French author, Mons. DAVID, I have no recollection of any person who has suggested that rest would effect the cure of diseases of the spine.

Occasional resting has been frequently conjoined with the use of drains, and machinery, in the treatment of those diseases; but it is believed that the practice of absolute resting, has not before been ascertained by any English practitioner to be of itself an adequate mean of cure for such diseases.

The enlightened practitioner will readily perceive that many additional arguments, might have been adduced in support of the preceding conclusions; and that many

other respectable authors might have been quoted in support of the opinions that have been advanced concerning the nature of scrophula.

I have chosen rather to relinquish the support they would afford than to increase the size of a book that was undertaken for no other purpose than the communication of useful facts.

On the utility of those facts alone are any hopes entertained of receiving public approbation.

It now only remains to describe the means whereby the excoriation, and other inconveniences occasioned by long confinement can be avoided; and to adduce the Cases in illustration of the opinions that have been advanced.

A crib, or narrow bedstead, must be procured, six feet in length, or rather, of a sufficient length to accommodate the patient; two feet one inch in height from the floor of the apartment, to the floor of the crib, whereon the mattress is placed; two feet five inches wide, with posts three feet seven inches high, (including castors) to be turned (by a turner) as a common crib.

It must be provided with a rail floor, instead of sacking; and with side boards to raise up and down; which, when half raised, will resemble the raised flap of a table, and must be supported with sliders, that can be drawn in or out when required; and which, when wholly raised, will furnish sides to the crib, for security, or

warmth at night. The castors should be of brass, and of the strongest description.

This crib is to be fitted with a mattress, from three to four inches thick, that has been French, or double stuffed, with the best horse hair; made two inches shorter, and two inches narrower than the crib, in the clear of the sides, head, and foot-board; for the purpose of affording room for raising the sides, and turning in the bed-clothes. Its width will be sufficient for the accommodation of the patient, though its dimensions will admit it to be drawn through the door-ways of the patient's day and night apartments. Its height, when the mattress is placed upon it, will be just sufficient to raise the patient to the level of a common table.

These minutiæ will not appear unimportant, when it is observed, that in consequence of removing the crib from one apartment to another, the patient may enjoy the advantages of a purer atmosphere, as well as the pleasures of society.

The height of the patient's situation will also afford its advantages. It will be found to be a more agreeable, and companionable situation than a lower one; and it will afford greater facilities to attendants.

The mattress should be as smooth as the seat of a sofa, perfectly flat, and nearly as hard as it can be rendered by the skill of the manufacturer.

The sides or flaps of the crib, when supported in their half raised, or horizontal situation, will answer the purposes of a

table, and serve, when covered with a blanket, to receive the patient once in a fortnight, or as often as may be necessary to turn the mattress.

The removal of the patient at these times will be easily accomplished without injury, or inconvenience, if the legs be gently raised a few inches, and carried from the mattress to the covered side of the crib; the patient's body being afterwards removed in the same careful manner, without raising it from the horizontal position.

In some of the worst cases, the period of confinement may be so long protracted as to make it of consequence, that the advantages of general education, as well as that better kind of education which is de-

rived from the society, and instructive conversations of intelligent friends, should not be withheld.

Considerable experience has shewn that, many of the most important parts of education may be as certainly obtained by young persons in this situation, as in the state of health; and if the dress of the patient, and the furniture of the mattress be properly selected, the appearance of the patient may be rendered as little particular as can be desired.

I am aware that to the generality of persons these suggestions may appear trifling, and unnecessary, but as delicate females of the higher classes, will constitute a great proportion of these patients; and as great pleasure has been derived by those whom I

have attended, from any little expedient that has rendered the appearance of the mattress and its furniture more like to a couch, or a sofa, I cannot withhold the information.

By this simple, but effectual, accommodation of the crib and mattress, it will be always found that the inconveniences occasioned by lying in bed may be avoided; and that their advantages will contribute to the improvement and preservation of health.

A melancholy proof of the absolute necessity of these advantages will be established by the account of a patient who lost his life under this mode of treatment, in consequence of having neglected to obtain them, after he had been made sensible of their necessity.

It will be of great importance to patients of this class, to have the advantage of two large airy apartments, of a healthy temperature, on the same floor, for the convenience of occasional changing, as well as for day and night residences.

The advantages of a dry, healthy, temperate situation, regular hours, and of proper, mild, nutritious diet, at equal divisions of time, are so obvious as to need no particular recommendation.

God bless the King

CASE I.

E. LACY, the daughter of James Lacy, a poor farmer of Bitton, applied the 16th of Oct. 1798, with a diseased hip joint. Her previous sufferings and disappointments in endeavouring to obtain relief, occasioned her to promise readily to submit to any means that might be recommended for the cure of her disease.

The affected limb was nearly two inches longer than the sound limb; it was diminished in size and was flaccid; the buttock was flattened, and when she attempted to walk considerable pain was occasioned. The weight of the body was therefore always placed on the opposite limb, at those times.

No doubt could possibly be entertained respecting the nature of the disease; its advanced state, or the difficulty of obtaining a cure: The poor Girl, and her Parents, were apprized of the difficulties of the case, and were instructed to believe that no other means than undeviating rest, without a minute of intermission, and the continuance of setons near the affected part a very considerable time, would afford her a chance of recovery. Their acquiescence was readily obtained; the setons were inserted; and the directions implicitly obeyed till the expiration of a year; though the abatement of pain, the contraction of the limb to its natural length, and its increase of plumpness, afforded reason to hope that the cure was accomplished at an earlier period.

It was then announced to her that the cure was completed; that the setons should be removed, and that she might arise; when to my surprise and satisfaction, she told me it was her wish, as she had obtained her parents' consent, to remain in bed a quarter of a year longer, to insure more perfectly a cure; as her life would be of no value if her limb were not restored.

The proposal was most cheerfully assented to on my part, and at the expiration of that period she arose in perfect health. She has since married, and now obtains a livelihood by occasionally walking to a market, 4 miles distant from her residence; never having experienced lameness or any other inconvenience in her thigh, from that period to the present, an interval of 14 years.

CASE II.

THE Friends of Miss P—K, about 16 or 17 years of age, requested my attendance at the Village of Bishport, near Bristol, on the 5th of Dec. 1802.

On my arrival I was introduced to three young Ladies, who were sitting together in a parlour apartment, all apparently in good health, and remarkably cheerful. The Parent of the Lady who was to become my patient, asked me if I could discover the Invalid, and on my replying in the negative, she told me that her daughter, whom she then pointed out, was completely palsied by a disease of the spine, for which sea-bathing, and a mechanical apparatus for

the removal of pressure, had been a long time used without the slightest advantage.

She also informed me that her application to me had been made in consequence of the recommendation of Mr. —, a gentleman of the most distinguished eminence in London, for the advantage of whose opinion she had, by the advice of her Physician, gone with her daughter to London, and had just returned; having previously thereto procured a new set of machinery, from a person I believe named Jones, by the advice of the Gentleman above alluded to.

On examining the diseased part, I found a considerable projection of two of the dorsal vertebræ, and the contiguous parts in a very tender state.

I also found that the sensibility of

the legs, thighs, and other parts below the diseased, was so completely destroyed as to make it impossible to excite the slightest sensation, by pinching, pricking, or any other means.

I considered it a duty to apprize the Relations of this interesting and very amiable young Lady, that much time ought not to be lost in the trial of the new apparatus, if relief were not experienced. It however unfortunately happened, that a period of more than 5 months was employed in its trial.

On the 15th of the following May, 1803, I was requested again to see this Lady, and to adopt any means which I might consider to be likely to afford a chance of recovery. By this time a remarkable change

had taken place. The cheerfulness and appearance of health, which at my first visit had been so astonishingly preserved, as to have occasioned no perceptible difference between her and her healthy companions, were entirely gone. Her general appearance was now so unfavourable, as to occasion me to fear that her life could not be preserved till a trial could be given to the means I intended to have recourse to.

One great point was however gained by this apparently unfortunate state of circumstances. A determination had been made by the very anxious Relations, to adopt implicitly any means that might be recommended.

She was immediately placed on an un-

yielding mattress without a pillow; setons were inserted on each side of the diseaaed vertebræ, and instructions were given to observe with the utmost care that the body should never be raised from the horizontal position, or moved for any other than natural purposes, or the dressing of the setons. A suitable regimen, and medicines adapted to the varying circumstances of the case, were exhibited. The general health soon became improved; but it did not happen till the eleventh month that any sensation was experienced in the palsied parts. About that time a tingling was felt in the legs; and from that period the recovery proceeded so rapidly, that at the end of the 15th month she could walk without in-

convenience, and by the end of the 18th month could run, leap, and dance as well as she ever could in her life.

The protruded processes of the vertebræ continued to project, in consequence of the occurrence of anchylosis previously to the adoption of recumbency.

I have had frequent opportunities of hearing from this Lady and her Friends, that no tendency to relapse, nor any inconvenience, has been experienced since the completion of her cure, a period of nearly 10 years.

CASE III.

ABOUT the time of the recovery of the last patient, or soon after, an application was made to me by the late Mr. E. THORNTON, of Warmley-house, near Bristol.

He had nearly lost the use of his lower limbs in consequence of a curvature of the spine, that had occasioned it to take the shape of a half-bent hoop. No one of the vertebræ had projected more than another, but the whole of the spinal column had assumed a shape similar to that which is occasioned when a person stoops moderately. The functions of the bowels and bladder were also impaired, and the state of general health imperfect. He had been provided with an expensive apparatus, apparently of the most perfect description for the removal of pressure, but his endeavours to use it were attended with so great an increase of distress as to occasion the most melancholy representations. A considerable degree of tenderness was experienced

on the application of pressure to many of the superior dorsal vertebræ. These circumstances induced me to recommend in strong terms the plan of continued recumbency; but, from the peculiarity of his circumstances in business, he assured me it was impossible.

No alternative remained but to accommodate his plan to his circumstances. He was directed to observe the horizontal position as much as possible, to wear the machine for the removal of pressure when he could not obtain the advantage of recumbency, and to procure as large and as constant a discharge as possible, with savine ointment, from setons that I had inserted 8 or 9 inches in length along the whole course of the tender parts, on each side of

the spine. These means were steadily pursued nearly 18 months without the smallest advantage, when by my desire he went to London to take the opinion of Sir JAMES EARLE, who recommended that setons should be again inserted.

The inconvenience and pain that had been so long fruitlessly submitted to, occasioned the patient to reject that advice, and in a year or two afterwards he was destroyed, by one of those irregularities of his bowels which had constantly accompanied the spinal disease; before it was in my power to reach his house.

There was nothing in the appearance of this Gentleman's disease that could now occasion me to doubt, but that a perfect recovery might have been obtained by absolute rest.

alone, if it could have been submitted to; whereas it will appear that after the most patient and fair trials of occasional resting, drains, and machinery, both separately and conjointly, through a period of nearly 18 months, neither relief nor advantage, of the slightest kind, were obtained by their use.

CASE IV.

SOMETIME in the year 1809, I was requested to meet two Medical Gentlemen, who had been attending a young Lady a considerable time, in a complaint that appeared to be very obscure.

A great degree of fever was constantly present, and an irregularity of the bowels that occasioned great difficulty in their management, constituted a striking peculiarity of her disease. The severity of the symptoms, and their effects, had induced so much debility as to render her incapable of any exertion. After vain endeavours to discover the causes of these symptoms in many supposed diseases, it was deemed advisable to examine the spine.

The cause of the mischief was immediately discovered. Five of the vertebræ were found in a diseased, protruded state; and so exquisitely tender as to render pressure almost insupportable.

A crib and mattress were immediately ordered to be made, and as soon as they

were ready, and furnished with sheets, counterpane, &c. the Lady was laid at length on the mattress, without any elevation of the head; appropriate medicines and regimen were continued, and in two or three weeks the amendment of the general health was astonishing. The recovery proceeded regularly, without interruption or abatement, till a perfect cure was ac complished.

Undeviating rest was persisted in till the expiration of the 11th month, when this young Lady arose in as straight and as perfect a state as possible. Her health has continued uninterruptedly good from that time to the present.

CASE V.

ABOUT the commencement of the year 1809, I was consulted by a Lady for her Son, aged 16 years, who about the month of July 1802, when at Weymouth, was observed to complain of a pain in his back.

On the 6th of August in that year, 1802, he was placed under the care of a Gentleman in Bristol, who, at his first examination, discovered that his pain had been occasioned by a disease of some of the dorsal vertebræ.

Caustics of a very large size were immediately applied on each side of these vertebræ and a copious drain was kept up nearly twelve months, during the whole of which

time great attention was paid to his Surgeon's direction to recline as much as possible. At the expiration of that period it was observed by this Gentleman's Mother that the disease had increased, and that one or two of the vertebræ projected a little. In consequence of this discovery another ingenious Surgeon, who had acquired celebrity for the treatment of diseases of the spine, was applied to. I am informed he thought lightly of the disease and expected a speedy recovery.

A well constructed instrument for the removal of pressure, was applied by him, and its use was steadily continued five years and a half, under his almost constant observation. At the end of that time my opinion was desired. It then appeared

that eleven of the vertebræ had protruded, so as to form a very large unsightly curve; a considerable mass of bony matter had also been deposited on each side of this curve, and I was informed that it was absolutely necessary for him to relieve the diseased parts from the effects of pressure by the constant daily use of the machine, whenever he attempted to sit, stand, or walk.

Little tenderness was however discovered on the application of pressure, and I ventured to hope that the disease would not increase. I therefore requested the Lady to place her Son again under the care of the Gentleman who had so long had the management of his complaint, and informed her I believed he would not become worse,

and probably might get so much better in time, as to be able to discontinue the machine; which appeared to be very desirable, as it was said that it had altered his countenance. My advice was taken, the young Gentleman was again placed under the same care, and the same means were again resorted to.

In less than a year he was brought to me again, and I was then told that I had been deceived in the opinion I had formed, and that he was much worse: on examination I found the report was a correct one, and that the soft parts had by this time become thickened and enlarged in so great a degree, as to have caused an addition to the tumour equal to its bulk when before examined. The inflamed appearance, and tenderness

of the soft parts, as well as the exquisite sensibility which the bony mass had now acquired, clearly shewed that the patient's life would be endangered by any further omission of the advantages of absolute rest. A proper crib and mattress were therefore immediately procured, and the patient laid upon it without any pillow. A suitable regimen was directed, and with the exception of occasional aperients, no other means were had recourse to.

The state of general health was very soon improved. The tenderness and inflammation of the affected parts, almost as soon removed, and in a few weeks the inflammation, tenderness, and tumefaction of all the affected parts, had nearly disappeared.

In a few months a tutor was procured, and

a system of mental improvement diligently acted upon through the remaining part of the confinement. At the termination of the 15th month he was allowed to rise, his health being in all respects perfectly re-established; and it was then ascertained by measurement that he had acquired 3 inches in stature.

I should regret that any circumstances of delicacy toward others, prevented me from availing myself of the permission of this Gentleman and his Friends to subjoin his name to this statement, if other cases equally remarkable were not about to follow, where no such circumstances of delicacy exist. It may not however be amiss to state that he was visited by Dr. HAWKINS, of Newport; Dr. PUGH, of Sher-

borne; and Mr. PERKINS, of Oakhill; whilst he was under the plan of treatment which has been described.

His health continues perfect. He has never worn any machinery, nor needed any since his recovery.

His confinement was not irksome or productive of complainings. A previous union of the bones prevented the removal of the curve.

This dreadful disease, which had existed between 7 and 8 years, was cured in 15 months.

CASE VI.

AS the following statement is drawn up from memory, in consequence of the notes having been mislaid that were taken at the time of visiting the patient, it must appear imperfect. In every essential circumstance it is however strictly correct. About three years since I was requested to meet Dr. HAWKINS, of Newport, Monmouthshire, in consultation on the case of Mr. EMERSON, at the seat of Colonel TYNTE, in Glamorganshire. His appearance indicated that he was nearly forty years of age; he was a large robust man; his countenance, however, clearly shewed that he was labouring under some severe disease. The Doctor

had discovered a few days before my attendance, that a paralytic affection of the lower limbs, which had recently occurred, was occasioned by a disease of some of the vertebræ. The spinal processes of these vertebræ were in a projected state, and so exquisitely tender as to occasion the most severe pain when examined. He was unable to move, or to bear any position except the horizontal one. His situation appeared to be most uncomfortable; he was lying on a very soft bed, which had sunk under his weight so completely as to have nearly enveloped him.

The nature of his disease was explained both to himself and his family, and it was desired that the proper means for his accommodation, and the insuring of an unde-

viating position, should be immediately procured. The recent date of his complaint, the apparent strength of his constitution, the salubrity of the situation, and every other circumstance, seemed to justify a favourable prognosis. He was accordingly encouraged to expect that in a reasonable time his patience would be rewarded by a recovery; and I believe I may venture to say, without the risk of mistake, that his prospect was quite as clear as it was represented to be. About the time when I expected to learn that his amendment was perceptible, or in about two or three months, I was informed of his death. The information appeared scarcely credible; but in a short time after I was informed by Dr. Hawkins that the mattress and other means

of accommodation were not procured; and that in consequence of continuing to remain *in* his soft bed, extensive excoriations were occasioned over his back and loins, which became sphacelated, and destroyed him in a few days.

The history of this melancholy, and much to be regretted, termination of a case that might have been so easily cured, by proper means, will perhaps be as useful as many of the accounts of the more successful cases.

CASE VII.

ON the 28th of March, 1811, I was consulted by the Father of a Lady, about 12 years of age, whose health had been obser-

ved some time to be on the decline. Her countenance was sallow, her appetite bad; she was a good deal troubled with headache, and, it had been remarked that she walked with some difficulty. A Medical Gentleman had seen her previously to my attendance, and, in consequence of discovering that a disease of the spine was the cause of her indisposition, he had recommended the insertion of setons. My examination shewed me a lateral curvation toward the right side of the lower dorsal and lumbar vertebræ. I also discovered, by pressing the spinal processes, that three of the superior dorsal vertebræ were in a very tender state. I could not doubt but that the advantages of undeviating rest would prove sufficient for the accomplishment of this Lady's cure.

She was placed on a mattress, and kept in an airy apartment; her diet was directed to be mild and nutritious; and she was ordered to take a draught with a dram of the muriate of lime three times a day. At the end of May, about two months after the time of her commencing the plan of resting, her health appeared to be nearly re-established. The tenderness of the spine was not however entirely removed. About that time I was reluctantly obliged to relinquish my little patient; she was removed in the horizontal position to her Father's residence, at the distance of sixty miles; the journey was however borne with no other disadvantage than considerable fatigue, and her perfect recovery was accomplished in a few months more by a continuance of absolute resting.

CASE VIII.

ON the 17th of April, 1811, I was consulted by the friends of Miss —, aged 15, on account of a disease of the spine, for which setons had been recommended. Upon examination, a slight lateral curvature was observed, and on pressing the processes, it was discovered by the tenderness, that some of the dorsal vertebræ were in an inflamed state. Absolute rest, in the manner described, was therefore recommended; and as the general appearance indicated that a tonic remedy was necessary, the muriate of lime was ordered; no material affection of the parts below the diseased had occurred, nor had the general health been much injured.

I did not see this Lady a second time. She was removed to the country, and the directions observed there. A perfect cure was obtained in 6 or 7 months, but of the exact time I am not certain.

CASE IX.

MISS Collier, aged 15, of the Island of Barbadoes, whom I had known many years to enjoy the most perfect state of health, was observed to become listless, to lose her health, and to be incapable of walking properly, about the end of July, 1811.

On examining her spine I discovered that 5 of the dorsal vertebræ were in a diseased

and considerably protruded state, and that those bones, as well as the contiguous soft parts, were incapable of bearing the slightest pressure without the production of a considerable degree of pain. She was removed from her school, in Clifton Mall, to an airy lodging near my residence in Bristol, for the advantage of more frequent attendance; a crib and mattress of the kind already described were procured, and when furnished with sheets, counterpane, &c. she was subjected to the resting process, and in the straight position, without any elevation of the head.

The muriate of lime was considered to be necessary, and she had the advantage of two airy apartments, with doors opposite each other, so that her removal from the

sleeping apartment to the day apartment could be always accomplished with facility. The improvement of health was almost immediate; the abatement of pain and of tenderness regularly progressive, and at the expiration of seven months the tenderness and protrusions of the vertebræ were entirely removed; the limbs had recovered their strength and motion, and it was apparent to every person that she was in a perfect state of health. It was also ascertained that she had acquired several inches in stature.

CASE X.

MASTER WM. CASTLE, Son of THOS. CASTLE, Esq. of Portland-Square, Bristol, when about a year old, was observed to have lost his health, and it was discovered that he could not move his legs as well as he had been accustomed to do. On examining the spine, I discovered that four of the lower dorsal vertebræ were in a diseased and protruded state, and that great pain was occasioned by moderate compression, either of the bones or contiguous soft parts. Absolute rest on a hair mattress was strictly enjoined. The muriate of lime, in appropriate doses, directed, and the constant care of a con-

fidential servant ensured. The advantages resulting from those means were soon apparent; they continued progressively to increase till the cure was accomplished. At the end of the tenth month he was allowed to roll and play on a carpet; in a short time after he got on his feet without assistance, and has continued in perfect health from that time to the present. The curve is entirely removed.

CASE XI.

I SHALL in the remaining statements allow my patients, and their friends, to make their own reports. The Lady whose statement is subjoined, had her distress

occasioned by a disease of several of the lower dorsal vertebræ, for the cure of which an eminent Surgeon of Oxford, and the Gentleman who attended her family, at their residence near Banbury, considered caustics to be necessary. The cure was accomplished by absolute rest alone, occasional medicines excepted.

" *June*, 1811. Occasionally a slight pain
" in the left leg, sometimes a little swelling
" pain, increased by degrees until Dec.
" following, when both legs were almost
" constantly in pain, not able to take much
" exercise, frequent pains in the head, chest,
" and side.

" *February*, 1812. Sometimes a pain in
" the back, which from the beginning of
" March became constant: from this time

"I was unable to lift up my legs or move
"them without great inconvenience; my
"strength decreased every day, and the
"pain in the chest, &c. became much more
"frequent and violent, which continued
"until May following, when I lay down;
"and in less than a week every unpleasant
"feeling was removed. After a confinement
"of seven months, I got up, perfectly strong
"and well.

"E. K.

"*Nov. 29th*, 1812.

"Aged, when I lay down, 14 years, 5
"months."

CASE XII.

"IN August, 1810, my daughter ELLEN, "a very strong healthy looking girl, re- "turned home from making a visit of six "weeks; soon after which, I observed, a "slight degree of lassitude about her, par- "ticularly after walking, or any little ex- "ertion.

"Sometime in September I thought, in "lacing her stays, that her left hip ap- "peared to be enlarged. In the beginning "of November, I was confirmed in my ap- "prehension of her left hip being enlarged; "and about the end of that month, as I "was fastening her frock, I accidentally "put my fingers on the vertebræ of the

" back, just below the shoulder blades,
" remarking how thin her back was, where
" I thought I discovered, by my sense of
" feeling only, that the rib on the left side
" of one of the vertebræ rose higher on the
" left side than it did on the right.

" In the first week in January, 1811, we
" took her to London, but found she could
" not bear the motion of a gig without sit-
" ting in my lap, which she did the whole
" way; her journey however appeared to
" have been of benefit to her, for after her
" arrival at Clapham, her spirits and health
" seemed quite as good as ever; so much
" so, that from her countenance, no one
" could believe that any thing ailed her.
" Soon after our arrival we took her to her
" Uncle, Mr. ——, surgeon, of Chelsea,

" who examined her back, but said he did
" not wish us to be guided entirely by his
" judgment, but introduced us to Mr.
" KEATE, who decided that the complaint
" was a curvature of the spine, and gave his
" directions to Mr. ——, who undertook
" to write to our medical Friend at Bruton,
" giving him directions where and in what
" manner, to make two issues by caustic,
" on each side of the affected vertebræ.

" About the end of March I found I had
" great difficulty in keeping the issues
" open; I had not seen Mr. ———, for
" three weeks, and I sent to him two or
" three times before he could come; when
" he did come, he found the discharge was
" so trifling, that it was necessary, in order
" to procure a sufficient discharge, to apply

"blisters on the issues; this opened the
"wounds again, and that my dear child
"might not have to undergo a repetition of
"a similar application, I entreated that I
"might be permitted to use the beans in-
"stead of peas, as Mr. KEATE had sug-
"gested.

"In the beginning of May it was ob-
"served 'that the bladder was palsied.'
"Her bowels had always been inclined to
"costiveness, for full a year past. Her
"rest begun to get very bad; she would
"groan terribly in her sleep, and wake in
"great agitation, sometimes almost in hys-
"tericks; and this generally from five to
"ten times in a night. Her legs and feet
"were cold when she went to bed, and I
"recollect for some time prior to this, she

"could not get into bed without her legs
"being separately lifted up, on the bed.

"Her spirits were now bad; she was
"impatient, and unhappy, and we began
"to think that the issues were too much for
"her constitution, though still her counte-
"nance bore very little the appearance of
"bad health; but we thought her bodily
"strength evidently failed. In this uncom-
"fortable state she continued till the end
"of June, when we found that she every
"day appeared so much weaker, that it was
"with difficulty she could walk up or down
"stairs; not at all without help, or like an
"infant by the assistance of the walls. The
"weather had been bad for several days,
"so that she had been prevented from
"walking in the garden, when on the 7th

" of July, she expressed a wish to walk out
" between two ; it was with great difficulty
" we got her through the house, and when
" she came to the Lawn, we found she could
" not lift her legs over the grass, though it
" was newly mown close, and we were
" obliged to take her into the house again,
" in a chair. Her legs and feet were cold
" as a stone, and her spirits were so low
" that she could hardly speak, so visibly
" as it appeared, her present debility had
" affected her. Exceedingly terrified, I
" instantly wrote to Mr. ———, and he
" came the next day, when I informed him
" the state of my dear Child, as far as res-
" pected the loss of her powers of walking.
" He looked at her back, and said the issues
" should be healed, though at the same

" time he declared, the debility of the legs
" proceeded from the pressure of the spinal
" marrow; but he added, that the lumbar
" vertebræ was also affected, and that he
" would write to Mr. ——, and request
" him to consult Mr. KEATE. This he ac-
" cordingly did in a day or two after.

" Mr. KEATE gave his opinion, but added
" a wish that ELLEN might be put imme-
" diately under Mr. BAYNTON's care, at
" Bristol. We therefore lost no time in
" bringing her hither, a fortnight after Mr.
" —— had seen her, in which time the issues
" were healed; but I think I cannot err in
" declaring, that the curve in her back had
" considerably increased, at least it was
" considerably more visible, than at the
" time the caustic was applied.

"I brought my Daughter to Bristol, on
"the 22d of July, 1811, when she was
"immediately put into a state of absolute
"rest, on a mattress and crib. At this
"time she had so entirely lost the use of her
"legs, that when she stood on them she
"had not the least power of moving them.
"They were not, however, without sensa-
"tion, or at this time were they ever cold,
"but were subject to involuntary twitch-
"ings or drawing up, many times in a day
"or night; and whenever this happened, I
"found that rubbing them under the knees,
"and on the calves of the legs, was the best
"means of bringing them straight. Her
"appetite was tolerably good, but her sleep
"was interrupted by these involuntary
"twitchings, and she also groaned a great

" deal in her sleep, and seemed distressed
" as if by dreaming : her spirits were how-
" ever better than they were a fortnight
" before. From this period till the begin-
" ning of September, I observed that she
" grew gradually stronger in her legs, so
" that she could move them of herself to
" any part of the mattress, and could keep
" up her knees for ten minutes at a time
" without their being supported; the ach-
" ing pain in them, of which she so fre-
" quently complained, and which only was
" relieved by rubbing, gradually left her,
" and the twitchings decreased both in fre-
" quency and force; her appetite grew bet-
" ter, and on the 11th September we re-
" collected that she had not had one of
" these twitchings for nearly a fortnight; her

" sleep had also become so good, that she
" seldom waked once in the night. The
" slight pain in her side, of which she some-
" times complained, altogether left her, and
" she had the appearance of a healthy girl.

"*September* 13*th*—We find that 'the blad-
" der has recovered its power,' and that her
" bowels are becoming regular, for she has
" been enabled to omit taking her salts for
" three mornings. I must not fail to make
" one observation; which is, that she takes
" her medicine with the greatest regularity,
" and her limbs and body are regularly
" rubbed for at least half an hour every
" evening; and we have found that when
" from any circumstance the rubbing has
" been delayed for an hour, she complained
" of uneasiness and pain under the knees.

"*Sept. 29th.*—ELLEN continues nearly "the same; her spirits are uncommonly "cheerful; she never wants amusement or "regrets her confinement; but anticipates "with delight her perfect recovery, fre-"quently, however, remarking that she "finds her present position so perfectly "agreeable, though she has in no instance "lifted her head half an inch from the "mattress, that she believes she shall con-"tinue the same position when she shall "be perfectly well.

"On looking over my memoranda from "this time till November the 5th, I find "my remarks so uniformly alike, that it "would be only taking up time unne-"cessarily to copy them; they generally

" spake of good sleep, good appetite, and
" good spirits; without the smallest refe-
" rence to one bad symptom.

" In November I was obliged to leave
" my Child to the care of a Friend; and on
" my return again to Bristol, I had the
" pleasure of finding the observations were
" nothing but a continuation of *dittos*.

" *August 9th,* 1812. After a year, a
" fortnight, and three days, laying down,
" my dear Child has been permitted to sit
" up, and, as her strength would allow, to
" walk, which I have the inexpressible hap-
" piness of observing she is able to do, every
" day better than the last. To this I have
" only to add, that next to the gratitude and
" thankfulness I owe the Almighty, for so

"inestimable a blessing as the recovery of
"my dear Child's health and strength, &c.
"&c. &c.

"E. N. N. Cosens."

"*Bristol, Aug. 27th*, 1812."

In this Lady's case 6 of the dorsal vertebræ were in a diseased, and protruded state, forming a considerable curve. At the time of recovery the curve was considerably lessened but not entirely removed. Its complete removal had been prevented by a previous union of two of the vertebræ.

I have lately heard from Bruton that she continues in perfect health.

CASE XIII.

"*Westbury*, 13*th Dec.* 1813.

"Dear Sir,

"I should be wanting in duty "to the public, but especially to you, by "whose kind care, and judicious treat- "ment, I may with truth affirm, my child "has been rescued from an untimely grave, "was I not to comply with your wishes, to "make his cure known to the public. You "are therefore at liberty to publish his "case and name; and in order to assist in "your benevolent work, I beg leave to sub- "join a faithful statement of the early "symptoms, progress, and treatment of "the disease, before he became your pa-

" tient; which, in my own opinion, had its
" origin from the scarlet fever. Since my
" boy's return, we have rigidly attended to
" your directions, and have confined him
" some hours in each day to his crib; but
" latterly, we have allowed him the same
" liberty of play and amusement, as boys
" of his age usually take. I have great
" pleasure in adding, that he goes on so
" well, that immediately after Christmas
" I purpose sending him to school.

" I am, dear Sir,

" Your's faithfully,

" RICHARD WETHERELL."

" P. S.—I was in London last week,
" which prevented my returning an earlier
" answer."

" In the autumn of 1809, Master THO-
" MAS MAY WETHERELL, at the age of 3

" years, had a slight attack of the scarlet
" fever, of which he soon recovered. In
" the spring following, without any appa-
" rent symptom of disease, he put on a
" pale and sickly appearance, and in the
" course of a few months complained oc-
" casionally of slight pains in his back and
" legs, and we observed, he could not go
" up and down stairs with his usual faci-
" lity. The pains continued, but without
" any additional symptoms of disease, till
" the autumn of 1811, at which time a
" small lump appeared about the middle
" of the back bone, which was pronounced
" in a diseased state. About the middle of
" November, 1811, we applied one large
" caustic issue on each side of the part
" affected, which caused a great discharge,
" and we kept him reclined as much as

" possible on his couch. Soon after the in-
" sertion of the issues, the child began to
" stoop; and about the middle of the fol-
" lowing April, he became almost bent
" double, so much so, that he could, with
" difficulty walk, by putting his hands on
" his knees.

" Perceiving that the child was every
" day getting weaker, and that symptoms
" of dissolution appeared; we suffered the
" issues to dry up, when his health rather
" improved. The beginning of September,
" 1812, he was put under your care. I
" should add, that the pains in his legs
" continued, one of which, from a con-
" traction of the muscles, was shorter than
" the other."

From the Rev. Richard Wetherell, of West-bury, near Gloucester.

Master WETHERELL, who had previously been attended by two Surgeons, became my patient on the 8th of Sept. 1812. His case was apparently as aggravated and hopeless as any could have been; nearly all the dorsal vertebræ were in a very diseased state; they had yielded so much to the pressure of the parts above, as to have formed a curve nine or ten inches long, of a pyramidal shape, that projected from its base to its point four or five inches; a considerable quantity of bony matter had been deposited along each side of the projecting vertebræ; the contiguous soft parts were thickened and very tender; his ribs had lost their arched form and were so flattened as to have occasioned the breast bone to project some inches above the chin, when he was placed on his back; his belly was

remarkably large and tense, his appearance was that of a most emaciated, and almost dying child. On being asked by his father whether it were possible to do any thing for him, I replied that it was an extreme case, and that I feared the event might prove unfortunate: that opinion was influenced in a great degree by a presumption that the mesenteric glands were diseased beyond the power of recovery. He was however placed on a nicely adapted hair mattress, in airy apartments, that afforded him the advantage of a good sleeping room and also of a good cheerful day-room.

Small doses of the powder of scammony with calomel were occasionally given for the removal of fæculencies. The muriate of lime (in doses of a dram three times a day) was ordered as a general medicine;

his diet was light, mild, and nutritious, and he had the advantage of the whole time and attention of a judicious faithful servant. He was kept constantly on his back, by means of a piece of broad linen webbing that was passed under his back over his breast, and secured at the ends with pins to the sides of the mattress. Improvement was soon visible, every week rendered it more apparent; and in a few months his health was perfectly restored.

On the 15th of the following June, after nine months undeviating rest, he was allowed to return to his home; at which time the curve was entirely removed, except in the middle part, where a previous junction of two of the vertebræ had rendered it impossible. His ribs had recovered their arched form, his breast had become as flat

and natural as the breast of any other healthy child; his belly had also been reduced to the natural size. The period of his confinement appeared to be a period of perfect happiness; he was continually cheerful, and calling loudly to the inhabitants of the other parts of the honse.

Any comments on the preceding cases are unnecessary. If they fail to convince those who are capable of forming correct conclusions, of the superiority of the practice recommended, it is not probable, that any additional arguments would produce such a conviction. I shall therefore only add, conformably to my promise, of recording the unsuccessful cases, that a failure which has not been related, was occasioned in the case of a young lady who

laboured under a disease of the hip-joint, as well as a disease of the spine, by a large abscess of the hip, which pointed in the thigh, and destroyed her. This case was treated conjointly with drains and rest.

Another patient, who labours also under a disease of the hip-joint, as well as a disease of the spine, that I have seen four or five times, in consultation with other practitioners, at a considerable distance from Bristol, I am informed proceeds slowly and rather unsatisfactorily.

Four cases of diseased hip-joint have been cured by the combined effects of rest and other means. Two have resisted those means; and two are now under *occasional observation*, that proceed very slowly.

In the 5th and last Cases, the tender cuticle that covered the cicatrices of the wounds that had been occasioned by the caustics was sometimes abraded; whenever it so happened, lint pledgits of soap cerate spon healed those abrasions.

Since these sheets were prepared for the Press, an account of a spontaneous cure of this disease, by rest, has been published in a well written paper, by Dr. ARMSTRONG, in the last number of the Edinburgh Medical Review.

E. Bryan, Printer, 51, Corn-Street, Bristol.