

**Therapeutic manipulation, or, Medicina mechanica : a successful treatment of various disorders of the human body, by mechanical application / by I.G.I. de Betou.**

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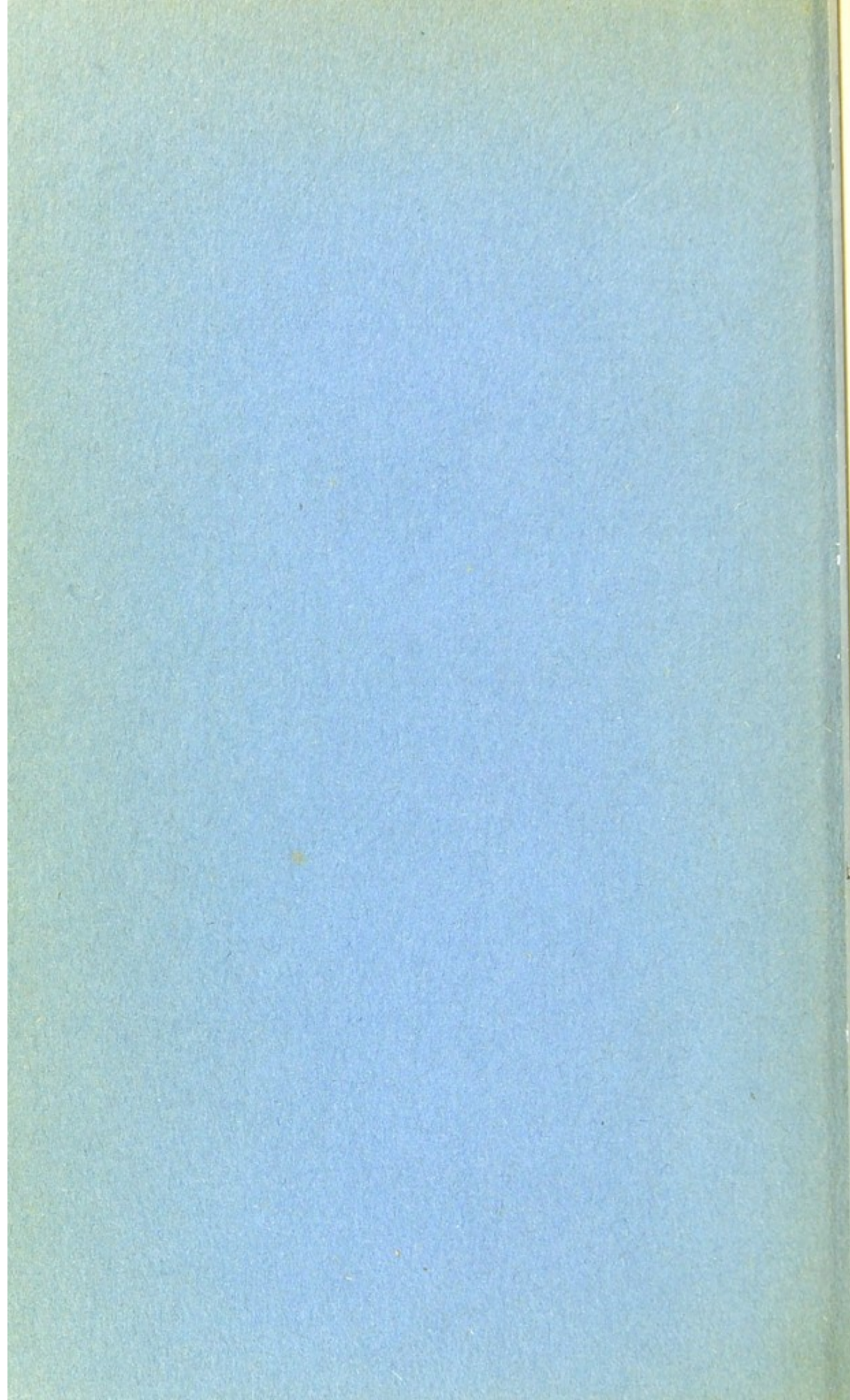
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Therapeutic Manipulation  
by

I. de Betou

1851







THERAPEUTIC MANIPULATION;

OR,

MEDICINA MECHANICA:

A

SUCCESSFUL TREATMENT

OF

VARIOUS DISORDERS OF THE HUMAN BODY,

BY

MECHANICAL APPLICATION.

BY

I. G. I. DE BETOU,

MEDICAL PRACTITIONER IN THERAPEUTIC MANIPULATION.

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THIRD EDITION, WITH ADDITIONAL CASES,

BY

JOHN W. F. BLUNDELL, M.D.

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LONDON:

SIMPKIN, MARSHALL & Co.

STATIONERS' HALL COURT.

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[DEDICATION.]

TO  
HIS EXCELLENCY  
COUNT BJÖRNSTJERNA,

GENERAL-IN-CHIEF OF THE SWEDISH INFANTRY,  
ENVOY EXTRAORDINARY AND MINISTER PLENIPOTENTIARY FROM HIS  
MAJESTY THE KING OF SWEDEN AND NORWAY  
TO THE COURT OF ST JAMES'S,  
MEMBER OF THE ACADEMY OF SCIENCES OF SWEDEN,  
AND HIMSELF AN  
AUTHOR OF MANY IMPORTANT SCIENTIFIC AND POLITICAL WORKS,

*This little Treatise*  
IS HUMBLY DEDICATED,  
AS A TOKEN OF GREAT ESTEEM,  
BY HIS FAITHFUL SERVANT AND COUNTRYMAN,  
THE AUTHOR.





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## PREFACE TO THE SECOND EDITION.

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THE object of this little Treatise is to give to medical men and the public hints on the existence of a Medical Agent of a mechanical order. But, *in limine*, I wish it to be clearly understood, that I do not endeavour to introduce it as an universal cure for all complaints, or to place it in opposition to the old practice of medicine. On the contrary, I desire to show that this mechanical agency is only to be considered as a branch of the many therapeutic means which are applicable for the cure of various diseases to which man is liable; and frequently it commences where the usual mode of treatment finishes. I therefore rely upon that consideration and support which truly enlightened medical men will not refuse to give to a new subject, when they find it in full harmony with the laws of physiology and pathology.



In order to give an estimate of the high value this treatment possesses in Sweden, I have subjoined an extract of Count Björnstjerna's letter, in which he acknowledges the dedication of this pamphlet :—

“ STOCKHOLM,—*February* 14, 1843.

“MY DEAR SIR,

“ I have just received your very interesting phamplet on Therapeutic Manipulation, which you have dedicated to me in so kind a manner, and for which I beg you to accept my warmest acknowledgment. It does much credit to your acquaintance with the subject, and will be of much use in making known in England the adaptation of mechanical treatment to the human body in a scientific manner, an adaptation of which our country must enjoy the honour of being the first one in Europe with regard to its discovery.

“ I hope to return to England in May next, when I shall have an opportunity of personally expressing to you my acknowledgment for the dedication of your book to me.

“ H.R.H. the Crown-Prince\* has this year made use of the Therapeutic Manipulation with the best results against a weakness brought on by a rheumatic affection, and my brother-in-law has also been under the same treatment, and derived great benefit from the same.

\* \* \* \* \*

“ With my sincerest regard and friendship, I remain, my dear sir,

“ Your obedient servant,

“ BJÖRNSTJERNA.

“ To I. G. De Betou, Esq.”

\* The present King of Sweden.

I have only to add that this treatment being entirely of a mechanical nature, is quite harmless in its application, and without any pain to the patient operated upon.

## I. G. I. D. B.



## EDITOR'S PREFACE.

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Mr. De Betou, from press of other duties, having confided to me the agreeable task of preparing this the third edition of his pamphlet for the press, I have merely to state that the original text remains unaltered, and that the present is laid before the public in the form assumed by former editions. Whilst, however, it has not been found necessary to alter the subject-matter in any way, I have, with his concurrence, affixed statements of nearly *thirty cases*, the greater part of which came under my own personal observation, and may be referred to in the Appendix in addition to those previously given.

J. W. F. B.

32, FINSBURY CIRCUS, CITY.

1st June, 1851.

ON

## THERAPEUTIC MANIPULATION.

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THAT mechanical applications, as well as bodily exercises, have been of great service for the cure of disease, is a fact well known since the time of Hippocrates, but it belonged to the great genius of Professor Ling of Sweden, to bring into a system, and scientifically to apply peculiar and determined motions for the cure of individual diseases. Notwithstanding the benefit which he thus conferred upon his fellow creatures, his system was received both with opposition and scorn. Was not this at first the lot of a Tycho Brahe, a Linnæus, a Harvey, a Jenner, and of many other of the fixed stars in the great firmament of science? Inexhaustible in his labour, Ling at last succeeded in attracting the observation of the Swedish Government, and an institution was formed at Stockholm, where he had an opportunity, upon a greater scale, to practise his philanthropic exertions. The institution consisted of



two departments ; the first was for healthy persons, in order there to develope and strengthen, after certain determined laws of motion, their frames and constitutions. Regular teachers were here prepared and examined, in order afterwards to be distributed in the schools of the country, there to watch over the physical education and training of the young. For the results I proudly refer to those who have seen the "*adolescentes*" of the Swedish schools, particularly those of the Royal Academy of Cadets, the students of Upsala, Lund, &c. The second department was the medical, where motions were applied for those diseases which are fully curable by this method ; this medical department has its separate school with its own anatomical hall, and the professors are paid by Government.

I do not intend to speak of the great use of the first or the *hygienic* department in preventing diseases, by the right and harmonious development of a weak frame, because my time and space allow me here only to treat of the application and effects of the *Therapeutic* manipulation.

Therapeutic Manipulation, (*Medicina Mechanica*) is a system of motions and mechanical applications, peculiarly adapted to the various parts of the human body. That great effects in our body may be produced by motion, every one knows who has suffered from the hateful complaint called sea-sickness, which is produced solely by the motion of the ship ; and most well-informed persons are aware, that tickling the feet may bring on convulsions, but a slap on the



head will recall the person from the *faint* that might otherwise become death; and in the hands of the Persian physicians beating the body cures the ague. Amongst the people of the East, a passive application of motion to the body under the name of shampooing, has been used from time immemorial, in order both to cure disease and to refresh the body; and every one who has by accident received a blow or contusion, knows that friction—which increases the activity in the veins and produces absorption—will give relief. Therapeutic Manipulation has nothing of the harshness of the former examples. These instances are mere extreme cases to prove the really curative influence of an agency obviously mechanical. Whatever displaces or produces motion on one part of the body, must also produce a corresponding change on neighbouring parts capable of movement. Now every atom of the human body moves. Disease consists either in the too quick or too slow movement of the whole organism, or of one or more of its parts. The smallest angle produced on a nerve, blood-vessel, or muscle, either by the position of the body, or by external application, causes a change in the parts more immediately contiguous, a less and less marked change in the more distant parts; till, like the undulations of the air, its force completely dies away. Slight pressure on a nerve irritates it; strong pressure gives it pain. Press the same nerve with still greater force, and it becomes paralytic. The parts to which its branches are distributed are all similarly influenced by the movement. Did a blow only injure the parts



on which it fell,—the leg or arm for example,—how could persons faint, or even die, as they sometimes do, from such a frequently occurring accident? Experience tells us that even in health we sleep better in certain positions than in others; in disease this is still more strikingly the case. Position is the mere mechanical adaptation of the body to the bed. To place the body in certain angles rather than in others is the first step of mechanical treatment. Persons who suffer from internal disease intuitively adopt a position calculated in some measure to relieve their sufferings. One leans against a chair or table, another doubles himself up, while a third places himself in a reclining, or horizontal position. How much *mechanical* movement has to do with the proper performance of our various functions, all who have sat a few hours in a carriage can testify. On first getting out, the limbs are stiff and refuse to do their office. Compare the arm of the porter and the leg of the drayman with the same members of a man-milliner and an attorney's clerk, and it will at once be allowed how greatly mechanical motion may influence muscular development at least. When the same drayman and porter are only a few months out of employment, the eye will at once detect a marked difference in the size of the leg of the one, and the arm of the other. Now, motion can be so applied to the head, chest, and other parts in such a manner, as either to quicken or relax each and all of the various movements within. By *suitable* manual movements, and by other simple mechanical contrivances, diseases



may thus be cured with a great deal more of certainty than by medical agency ; painlessly in most instances, and without peril to the patient in any case whatever.

The motions which the patient, after a right diagnosis, receives, are at first mostly of a *passive* nature, or independent of his volition. The patient gives himself up entirely to the operator, who, chiefly with his hands, applies the motion to one or more parts of the body, as may be required. The passive motions are different, as : *vibrations, percussions, longitudinal and tranverse pressure, frictions, rotations, lubrications, strong irritations, flexions, extensions, &c.* Further the vibrations may be *fixed* or *moveable* ; frictions may be *linear, circular, or cycloidal* ; percussions *sharp* or *flat*, &c. The length of time an application ought to last, depends upon the rhythm of the pulse, the nature of the disease, and the constitution of the patient. The position in which the patient is placed during the operation, is also of great consequence ; he can receive the motions in a recumbent position, when almost the whole muscular system is at rest, sitting, standing, or in twisted positions, and for every one of these the effect of the same motion is different. The patient receives generally one application within twenty-four hours, but it is often necessary to give two applications a day ; this entirely depends upon circumstances.

The therapeutic *active* motions, again, are those which in a certain measure depend upon the patient's volition, and are determinate as to time and space ;



such are changes of angles with different parts of the patient's body, with or without resistance, but mostly performed in a uniform manner ; for instance, if he were to extend his arms in a lateral and horizontal direction, and the operator placed his hands upon the patient's wrist, and gently depress the arms in a uniform time, while the latter gently resisted, at the same time giving way by degrees, then this motion is called a therapeutic *active*. The same may be done with the head, neck, trunk, and the lower extremities.

The effect of an active muscular motion, is a rush of arterial blood towards those muscles which are brought into operation, (it can almost be said that they imbibe blood) ; the circulation of the whole system is accelerated and animal heat is generated. The next effect is an effusion of plastic lymph, whereby new muscular fibrils are formed ; and this is the cause why the muscles increase in bulk and strength by motion. But a high degree of activity of one part causes a proportionate loss of tone in other neighbouring organs ; consequently the strength of any part can be increased at pleasure at the same time that the strength of any other part can be diminished in the same way. An example of this is clearly shown in the highly developed state of the blacksmith's arms and his slender legs ; or in the strength of this part of an opera dancer, and her want of development and power in the upper extremities.

It is not required to have a profound knowledge of physiology to see the effect which this therapeutic agency possesses in many cases of disease, for we



must never lose sight of the fact that our organism is one *whole*,—a unity with a complete relation between its parts, and as a chemical effect can proceed from the internal parts to the external ones of our body in consequence of this unity, so can also a mechanical effect go from the external to the internal.

It is a well established fact, that muscular motion acts upon all the systems of our body. So for instance depend the formation and structure of the *bones* and particularly their shape, articulations, and directions, in a great measure upon the muscular system. A curvature of the spine can therefore only be cured by properly directed muscular motion, that is, by an increased action of the almost paralysed muscles of the spinal column, and by avoiding strictly to act upon their antagonists.

On the *circulation of the blood*, muscular motion and the therapeutic applications act both quickly and powerfully, and can be so directed at pleasure, that they either act upon the central or peripheral blood-vessels. For instance, a leap or running up an inclined plane, causes in a moment an increased activity in the circulation, which accelerates the pulse so much that it can be compared to nothing else but a transient inflammatory fever: a rubbing or friction again, applied to any part of the surface of the body, causes an increased activity in the cutaneous vessels of the same part, and produces at first a feeling as if lukewarm water were poured over the part. The effects of these two motions are greatly different, and they



are almost opposed to each other. In the first case the motion is purely *arterial*, but in the latter *venous* or, as it is called *absorbing*; because, in one case it acts upon the arterial system, and in the other upon the venous. An operator of this treatment can, therefore, affect which part or organ he chooses, in what degree of strength and for how long time he considers it necessary to call forth a change in the activity of the vessels. But an increased activity in one part is brought on by the blood rushing towards this part, at the same time partly leaving other neighbouring parts; consequently a clogged state of the vessels, or in other words *congestion*, can in this way be cured. It is clear therefore, that hemorrhoids (piles) may easily be cured by this agent by diverting the morbid state of the great viscera, and by relieving the congestiveness of their vessels. On this same principle can a congestion of the lungs, a catarrh, &c. be entirely cured by united arterial and absorbing motions. It will not be difficult now to comprehend from this how the *lymphatic* system is influenced and acted upon by this agent.

The *nervous system* is in the nearest relation to, and greatly dependent upon the muscular system. The tone of the nerves is increased and heightened by muscular motion; but if this be omitted they soon become weakened. For this reason it is that nervous diseases and nervous irritability belong almost exclusively to those persons who live a sedentary life, but are seldom found among the working classes of the community. The nerves can not only be strengthened,



tempered, and calmed through the influence of muscular motion, but these effects can also be brought about by direct or indirect pressure upon them. It is therefore possible to cure nervous weakness and irritability produced by debauchery and other weakening causes, by mechanical treatment; spasms and cramps, so common among ladies, can never be cured in a more certain and safe way than by this treatment.

The two modes of operation, the *active* and *passive*, are often conjointly made use of. The efficacy of the *active* motions might often be too great if it were not modified by the reaction of the *passive*. These, on the other hand, would often be too feeble in their influence if unsupported by the arousing of the voluntary power.

It is clear from the foregoing, that these motions can be varied *ad infinitum*, and that a set of applications which are suitable in one case are not so in another. It would, for instance, be very wrong to introduce active motions for the upper extremities in a case where the patient suffers from an enlargement of the heart, or arterial motions for the neck in a case of determination of blood to the head. It is therefore necessary for the practitioner to select with great care his applications from all the resources he possesses in order to suit every individual case.

In order to convey an idea of the effect of these applications and motions, a few out of many hundreds are here enumerated.

*Raising the body by the arms* affects those muscles which belong to the respiratory apparatus, and



effects an equalization of the circulation of the blood in the lungs, which again causes an increase of primary cells, and leads to an improved growth and development, as well in the muscles of the shoulders and breast as in those of the arms.

*Bending the knees*, in an erect position of the body, increases the arterial supply of the muscles of the lower extremities, and is chiefly used as a *diverting* motion. If it be used in conjunction with a motion directed towards the trunk, its effect is divided amongst the above-mentioned parts, the great viscera, and the muscles of the trunk.

*Lateral twisting* of the trunk acts differently according to the way in which it is done. This motion acts partly upon the superficial vessels and nerves of the abdominal muscles, and partly upon the deep-lying larger blood-vessels, according to the resistance which the patient makes. The abdominal organs are acted upon with different power according to the different changes of angle into which the trunk is put.

*Raising the trunk* from a bent into an erect position. This is chiefly an arterial motion for the muscles of the neck and back, but is also venous. Through changes of angles which the trunk forms with the lower extremities, the diameter of the abdomen is decreased; and as the inspirations are almost continuous and only varied by a few expirations during this kind of motion, the quantity of venous blood in the abdomen is diminished, whereby absorption is increased in the abdominal organs. If it be desirable still more to increase such absorption, a gentle pres-



sure must be made upon the abdomen ; and if this be accompanied by resistance on the patient's back as he is raising himself gently up, a decrease of secretion takes place within the intestines, whereby this motion becomes highly useful in cases of diarrhæa.

*Ligature* is an application of the greatest use in the mechanical treatment. It is applied round the base of the skull, round the chest and abdomen, round the arms and legs, and wherever it is desirable to retard the venous stream. The effect of this, particularly when the ligature is applied to the extremities, is not only directed towards the soft parts, but also to the membranes of the bones and the bony substances themselves. Thus it is that it is so efficacious in varicocoele, in tubercles of the bones, &c. The tourniquet is therefore a most powerful instrument in this treatment.

*Friction*.—This operation can call forth quite different effects, according to its application to different systems or organs of the body, or according to the different degree of strength, or the different kinds of means by which it is applied. Performed gently on any part of the surface of the body, it hardly does more than cause a venous absorption in the cutaneous part ; but applied with a little pressure, it acts upon deeper seated parts, distributes both blood and lymph, and enlivens the activity of the nerves. Applied again to the neighbourhood of a diseased organ, it will allay pain, and divert congestion, and directed towards the region of the abdomen, it serves to promote the activity of the venous and lymphatic



systems, and to assist the function of the liver, and the intestines, &c. Applied along the course and ramifications of nerves, it stimulates their activity, and can by theis means be made to act upon the nervous centres, namely, the brain and spinal marrow. A friction along the longitudinal sinus on the top of the head produces a general venous absorption within the integuments of the cranium, which causes a peculiarly cold sensation along the spine. Relaxation of the uvula, for instance, which is caused by increased irritation of the vessels, is cured by applying friction to the palate, and is best performed by an instrument.

*Percussion*, if it be performed with the flat of the hand or an instrument, produces a quick and powerful venous absorption ; but it is much stronger if it be done in a hacking way, by the edges of the hands for instance. By flat and sharp percussions performed in the region of the chest, the respiration is made easier ; and this is done partly by the direct action upon the respiratory muscles, and partly by the passive motion communicated to the lungs. This application performed upon the extremities produces a venous absorption not only within the cutaneous tissues and fascial structures, but also within the muscles, and even upon the periosteum. Thus, it is to be regarded as the most efficacious means of Therapeutic Manipulation, in order to increase venous absorption.

*Vibration*.—This acts according to the strength with which it is applied, and directly on that point on which it is desirable to produce an effect. For



instance, if it be performed by the finger ends of both the hands in the epigastrium, it will prove itself, in conjunction with other applications, highly beneficial in hysterical or hypochondriacal disorders. If it be applied close to any of the articulations, it affects the ligaments of the joints; and in general, if it be applied to a smaller or larger surface, increases the venous absorption.

*Compression (pressure)*,—This operation is also directed to a certain point, and chiefly in order to compress a blood-vessel, or to affect a nerve. By these compressions prompt and great effects are produced and lively reactions are called forth. Agues, tooth-ache, rheumatic affections, nay, even scirrhus tumours, have been totally cured by compression.\* Applied to the jugular veins it has a strong effect upon the sinuses of the cranium, whereby the brain is put into an artificial state of congestion, which at last when the pressure is removed, causes a continued absorption.

*Rotation* is a rotatory motion performed with a part of the body, as for instance, the hand or the foot. If it be properly applied, it tends to lubricate the joint by stimulating the synovial membrane, causing a passive play of the ligaments, increasing the animal heat, and after dislocations is a most excellent means of restoring the normal state of the

\* This part of the mechanical treatment is used in some of the London Hospitals. We have seen enlarged and inflamed glands treated in the Dreadnought Hospital Ship by pressure; and one of the medical officers at this establishment related that other inflammatory cases had been treated in the same manner by pressure or dilatation.



ligaments. If a rotation be performed with the head, it creates a sensation of giddiness, by the venous blood being partly retained in the sinuses, which also has for effect an increased absorption. Again, if the rotation be performed by the thorax, when the pelvis and the lumbar region must be fixed, it affects the venous capillary vessels of the heart and lungs.

We have now shown a few of the motions and applications which are used in this treatment. The diversity and multitude of the motions are indefinite, and they can also be combined in various ways. Upon the proper combination of motions depends also the judicious treatment of disease, and as useful as this treatment is in the hands of the skilful practitioner, so dangerous is it when applied by the ignorant and inexperienced.

In order to show the efficacy of Therapeutic Manipulation in a difficult and chronic case, let it for instance be applied for enlargement of the heart, *Hypertrophia cordis*. Any treatment whatsoever in this case must have for its object the formation of new groups of vessels within the peripheral system of the circulation, if it shall be able to diminish the circulation within the heart, and not only allay, but even cure an organic disease of this organ. To effect this, mechanical applications are given to those parts which are situated farthest from the heart, or such motions are applied as have their object to develop the network of the vessels in the muscles of the lower extremities. Besides this purely active treatment, direct pressure on nerves ought to be



introduced, partly on the lumbar nerves, partly on the nerves of the thigh and popliteal region, but only in case the peripheral circulation and the muscular department should be much weakened. As soon as the activity of the vessels of the lower extremities has increased, and the animal-heat has returned, and the muscular system of this part has been more developed, &c., the arterial supply within the pelvis will become augmented. Again, when the violence of the movement of the heart is diminished, the breathing becomes easier, the coldness of the extremities ceases, appetite and rest at night have returned ; first then may motions be applied for the absorption within the heart and lungs, being yet cautious to avoid every motion which produces a formation of vessels within the muscles of the chest, merely using vibratory motions and percussions. Only at the end of the treatment will it be permitted to use active applications for the upper extremities and the respiratory apparatus. This is, in short, the march of the treatment in this case.

By a thorough acquaintance with anatomy, physiology, and pathology, and a perfect knowledge of these motions, it is clear that Therapeutic Manipulation is a most powerful agent, particularly in diseases of a chronic nature.

We have now given a few hints with regard to a science, which ought to stand high in the estimation of the public for its great usefulness ; and we have stated in a few words the existence of a therapeutic agent of mechanical order, which in efficacy does not



give way to any of the *materia medica*. No one can with reason say that exercise has no effect upon our body. If, then, the most illiterate person will not deny exercise its high value and influence on the economy of our frame, because that influence is so self-evident, how much less can we anticipate opposition or objection to exercise brought into a scientific system; and, according to its rules, applied to the human frame. The philosophy of the thing is as plain as it can be. *Nunquam aliud natura, aliud sapientia dicit.*

It is impossible nosologically to state in this little book all those disorders which are most beneficially affected by this agent, particularly as the chief object is merely to direct observation to the existence of a new treatment for the cure of many diseases. The diseases to which it is more particularly applicable, are obviously those of a chronic nature—errors of movement which medicine in many instances is utterly unable to correct, such as *Chronic Rheumatism, Gout, Hæmorrhoids, Constipation, Affections of the Liver*; also nervous affections, *Spasms*, for example, *Cramps, Headaches*, and *General Debility*, particularly when the last arises from early intemperance, or the abuse of aperient medicine. It is consequently well adapted to the treatment of *convalescents* after fevers. In the two first stages of *Pulmonary Consumption*, even, it is remarkably beneficial; nor is it altogether inefficacious in many acute diseases, such as *Pleurisy* and *Pneumonia*. Here, however, the patient must be treated immediatly at



the onset of the attack, for in such cases a few hours' delay makes the cure by mechanical means difficult, if not impossible. It is highly serviceable in *Paralysis, Asthma, Catarrh, and Influenza*. To *deviations of the spinal column*, so common amongst young people, particularly females, it is applicable in almost all cases. There is hardly a lady's school where crookedness of the spinal column is not one of the prevalent complaints. Here the mechanical treatment can be seen to best advantage. The knife and the rack, so constantly in use in the Orthopædic treatment, form no part of the *MEDICINA MECHANICA* in these cases. What is Curved Spine? It is seldom, though sometimes, a disease of the bones—it is a paralysis of certain muscles which keep those bones in position. “The mast of a ship is kept in the erect position by the *stays* and *shrouds*; if you divide or loosen these on one side, the mast falls more or less in an opposite direction. The human spine is kept upright by a similar apparatus—the *muscles*.” If any of these muscles, from bad health, become weakened or paralysed on one side, the spine, from the want of its usual supporting power, must necessarily, at that particular place, drop to the other side. But being composed of many small jointed bones—the *vertebræ*—the spinal column cannot, like the mast, preserve its upright form; but when unsupported, must double more or less down in the shape of a curve or obtuse angle; and the degree or situation of this curvature will depend upon the number and particular locality of the muscles so weakened and paralysed. This



disease or deformity, under all its complicated variations of external, internal, and lateral curvature, is the result of muscular weakness or palsy; which palsy, for the most part, is a feature or termination of long remittent febrile disorder. It is often a more or less rapid development of the usual diseases of children—scarlet fever, chicken-pox, measles, and so forth; but whether complicated with vertebral disease—with disease of the bones—or not, curved spine is no more to be influenced by cutting, issues, setons, or the unnatural and weakening system of constant lying on the back, except in so far as these horrible measures almost invariably confirm it by further deteriorating the general health of the patient.

When this treatment has been used against the *premonitory symptoms of apoplexy*, it has shown itself very efficacious. This dreadful malady which so often takes its prey by surprise, is certainly more common in England than anywhere else, arising chiefly from great excitement, overtaking of the brain and too nutritious diet. An antiphlogistic treatment has hitherto been used to prevent the fit. Bleeding, purgatives, and a low diet, have had the usual effect of palliatives; the patient has rallied for a time, but his stamina being reduced, the catastrophe has only been postponed for a short period. If, instead of this treatment, manipulations be applied to those vessels which are situated on the surface of the cranium, and light pressure made along and above the eyebrows, with fixed vibrations on the arteries of the temples, the circulation will



soon be considerably increased; and within a short time the giddiness and dimness of sight, of which the patient so generally complains, will be removed. After this, motions of pressure are performed along the arteries of the neck and throat, then upon its veins, and lastly upon both at the same time. Thus the superfluous blood is soon diverted from the head. It has been found beneficial during these operations on the vessels of the head, to give now and then one rotation of the head of the patient, the operator at the same time placing his hand with light pressure on the top of it. But in order to give a permanency to the results of this treatment, the operator must also apply *half active* motions to the lower extremities, to divert the blood to these parts, and there produce a greater want of nutriment. Another object is also gained by these manipulations, namely, the vessels themselves, after some time, receive a greater tenacity and strength to withstand the pressure of the blood upon their walls. It is necessary that the passive manipulations, alternating with active motions of the lower extremities, should be continued for some time; then the patient will decidedly be freed from all the symptoms of this horrid complaint, provided he avoids exposing himself to the causes in which it originated. On the contrary, should effusion of blood have already taken place in the head, before the manipulations were employed, even then this treatment will certainly be the best one to accelerate absorption and promote recovery.



*Costiveness* is another complaint very common in this country, and which, if allowed to go on for some time, often lays the foundations for many a serious disorder. The therapeutic manipulation has proved itself to be a decided and safe means of cure for this complaint. Costiveness arises from many causes, which often are very complicated; as from a morbid secretion; from an atony of the viscera, whereby the muscular coat of the intestines is unable properly to perform the peristaltic and vermicular motions, by which their contents are propelled; also from a weakness in the abdominal muscles, chiefly that one called *rectus abdominis*. The manipulations ought now first to be directed towards the abdominal viscera; by gentle vibratory motions in the region of the liver, this organ is stimulated to a greater and healthier activity; after this, motions of pressure along the intestinal canal, with vibrations of the intestines, together with motions of sharp percussion on the abdomen, performed by the operator's hands, whereby the blood is led in a greater quantity to the internal parts of the abdomen. After some time, half active motions are made in order to strengthen the rectus and other muscles of the abdomen and the back; for instance, the patient, who is placed in a horizontal position, raises by degrees, and with a little assistance of the operator, his trunk, till it comes in a right angle with the lower extremities, the knees being kept down by the operator's left hand; the patient goes back to the horizontal position in the same manner. This motion is always executed slowly



and (in what the laws of mechanics understand) with uniform time. The trunk in this motion acts as a lever of the third order, whose fulcrum is the hip joints; it is therefore clear that the power which is the contraction of the rectus muscle, and which here is placed between the fulcrum and the weight, has need of great exertion, and that therefore a great rush of blood will take place towards this region; the operator ought therefore to give *diverting* manipulations in the hypogastric region every time, directly after the former motion has been performed. After repeated manipulations for some time, this treatment will never fail to cure the most obstinate costiveness; and the patient will not have gained this at the expense of his nervous system, or of other vital organs, which often is the case after a continued use of strong medicines.

*Pulmonary* complaints and congestions of the chest, as mentioned above, are also safely cured by therapeutic manipulations, provided they are applied in the first stage of those disorders; here passive motions are of the greatest use, and the active applications ought to be performed rarely, and with the greatest care. If the patient is young, they may be used in the beginning, but only those which contribute to expand the chest. In the first stage of phthisis, before tubercles have begun to be developed in the substance of the lung, the operator ought to use gentle frictions, with pressure of the flat hand along the patient's arms, sides, and back. After this, fixed vibrations under the chest, passive motions with his



arms, and at last abdominal manipulations. The nerves and vessels between and under the ribs, which always are relaxed, should be strengthened in order to promote secretion and to ease expectoration. It is also often of use to give a vibratory motion to the trachea for the last mentioned purpose. All the motions ought to be applied with the greatest caution, and a short rest allowed the patient between every application. He must never be allowed to resist during any of these motions, in order that he may receive them in a perfectly passive state. When the nightly perspirations and difficulty of breathing begin to decrease, these are signs of improvement, and first then may *half active* motions be used; these are chiefly directed to the lower extremities, as to the feet and legs. It may often be of great service at the beginning of the passive manipulations, to give smart and quick strokes upon the soles of the patient's feet, in order locally to increase circulation and animal heat. When the patient gets well, he should make use of carriage riding, horse exercise, playing on wind instruments, and other measures which have a tendency further to strengthen and invigorate his system.

That the active and passive motions are quite different agents, is a truth admitted by many, but applied to practice by few. How often is not the patient advised to take exercise as he himself chooses; "to walk, take carriage riding, or go on horseback!" but how very different are all these three motions in their nature; the first is a full *active*, the second a full *passive*, while the third is



a combination of both, namely, an *active-passive*, motion. For making an active movement, those muscles which effect the motion must first be stimulated by their respective nerves ; but in a passive application, the patient's will does not in the least influence the motion of the part, nor the state of the motor nerves. During disease the nervous system is always more or less impaired, and it is therefore clear that it must suffer from being brought into too strong action ; from this consideration we see the great advantage of *passive* applications. Much walking is therefore always hurtful during illness ; particularly has experience proved this in diseases of the chest, which always become aggravated by walking or active exercise. Herodicus committed the great fault of advising his patients to walk from Athens through Megara to Eleusis, about forty-two English miles, without rest or food ; and he was also rebuked by his pupil Hippocrates, for having killed his ague patients by too much walking. From what is said of the difference between passive and active motion, it might also be concluded, that when the former is applied, there is never any feeling of exhaustion or tiredness with the patient ; the passive motion may be continued ever so long, and although there is exhaustion during the therapeutic active application, it is far from the same as during a common active exercise, on account of the former being always executed in a uniform time. The feelings, after the manipulations, are always refreshing and agreeable to the patient after he has become accustomed to them.



In concluding this little work I wish only to say, that between nine hundred and one thousand persons have already in London been under this treatment, and that all have more or less benefited by the same. Nearly all of the persons enumerated in the annexed cases are residing in London, and several of them have assured me that they will be happy to confirm my statement of their cures, &c., to any one who should be desirous of their evidence.



## APPENDIX OF CASES.

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CASE 1.—*Debility.* An unmarried lady aged 22, of lymphatic constitution, had suffered from debility for more than three years, when in October, 1840, she was advised to make use of the therapeutic manipulation; at that time she was so much reduced in strength that she could hardly sit up, but was obliged to be confined to her sofa. The pulse was slow, small, and contracted, scarcely fifty-four beats in a minute; her tongue was very foul, and the appetite much reduced; her skin was cold, and its colour of a sallow complexion. The state of her blood had long been such that if she happened to prick her finger with a needle, a yellow serum appeared instead of the red-coloured blood. The urine was straw-coloured and cloudy, containing albumen, and its specific gravity 1.016; her bowels were in a state of constant costiveness. In this miserable state passive motions were applied for ten minutes to the abdominal viscera, beginning with moveable vibrations; after this, the patient was left to rest till the evening, when the same motions were repeated. The next day the same mode of treatment was pursued, together with gentle percussions, applied with the operator's hands, over the region of the liver and the kidneys. The third and fourth day the same treatment; the fifth day the patient's pulse had improved, her tongue was better, and she felt some appetite. The applications were increased; instead of ten minutes', she received half an hour's application morning and evening. Besides the former motions, she now also received motions of pressure along the ramifications of the vessels of the extremities, lubricatory movements of the wrist, shoulder, and ankle joints, together with continued pressure along both sides



of the spinal column. At the tenth day the patient was able to walk about, and could sit up for some time during the day, when she also could bear applications of a more active nature. After six weeks' daily attendance she had entirely recovered, and is at this moment a very healthy person.

CASE 2.—*Pulmonary Disease.* This was also a young lady, aged 19, of a complex temperament, whose two brothers and sister had died of diseases of the chest; she had a long time complained of langour and a troublesome cough, and the slightest exertion in going up stairs or ascending a hill, hurried her breathing. The exacerbations had already set in twice a day, and during sleep she was almost bathing in perspiration; the pulse was more frequent than natural, and the bowels were often very much relaxed. By auscultation I found that the respiratory murmur was weaker than natural, and that the passage of the air through accumulated sputa produced a mucous rattle; the chest was very flat and narrow, hardly measuring five inches from the sternum to the corresponding point of the spine, and the right side of the chest considerably larger than the left, the arch of the ribs being more of an elliptical than of a parabolic form. The manipulation began with friction on the front and back of the chest and under the axilla, by the operator rubbing with his hand lightly in a rotatory motion. The next day this motion was increased, with light percussions near the clavicles, under the arms, and round the blade bones, together with lubricatory motions of the ankles and percussions on the soles of the feet; these applications were continued for two weeks, till the nightly perspirations became considerably lessened; then a passive motion was applied to her arms, together with a complicated motion of pressure and friction with the back edge of the hand between the ribs, and a fixed vibration in the epigastrium. These motions were continued daily for some time without any addition, till the nightly perspirations had almost disappeared and the cough was allayed; after this, the mani-



pulations became *half active*, viz., the patient was allowed to use resistance in some of the motions, which were always performed in uniform time, and movements were begun to expand her chest. After having continued the manipulations for three months, the patient was not only entirely cured, but her chest was considerably expanded, and she was able to run up and down stairs without the least difficulty. Instead of being thin and of a pale complexion, she was now fast growing stout, and had gained the real colour of health. The patient is now in the country, and I have heard that she enjoys perfect health.

CASE 3.—Mrs. S., a married lady, aged 26, of a delicate constitution, had lost a brother at Madeira, in pulmonary complaint. She suffered from great pain in the right side of the chest, together with hectic fever. Sir —— considered it a confirmed case of phthisis, and advised the patient by all means to leave this country for Madeira. Instead of going abroad, she placed herself under the mechanical treatment. I found her on the sofa in a very weak state, unable even to feed herself, from pain in the right side of the chest a little below the clavicle; her pulse irregular, and beating 130 times in a minute. The manipulations in this case begun almost with passive motions of an absorbing nature. After a short time she got a little stronger. More active motions were then introduced, till she had gained so much strength that powerful arterial applications could be directed towards the lower extremities. She then began rapidly to improve, and soon entirely recovered. It is now nearly four years since her recovery, and I am happy to find her doing exceedingly well, although still obliged to use some precaution.

CASE 4.—*Premonitory symptoms of Apoplexy, connected with habitual costiveness.*—This was a mercantile gentleman, aged 54, of almost a pure sanguine temperament; he had for many years had a determination of blood to the head, together with symptoms of fulness and giddiness, throbbing of the arteries,



shooting pains along the vessels of the brain, dimness of sight, loss of memory, and sometimes a numbness of the hands and fingers. For this complaint he had been advised to be frequently cupped, which for the moment relieved him, but the symptoms always returned with more violence. He was also subject to a severe costiveness, and told me that for two years he had not once been naturally relieved, but used twice or thrice a week to take an aperient medicine, which he called "*baume de vie*." The diagnosis here could not be very difficult. The manipulations began, therefore, directly with pressures along the ramifications of the vessels of the forehead, fixed vibrations of the arteries of the temples, frictions with the palm of the hand on the shoulder and back, pressure along the vessels on the top of the head, along those of the neck, and so on diverting the blood downwards. After this the patient received strong *active-passive* and *uniform* applications to the lower extremities, in order to increase the calibre of its vessels, and make them a receptacle of the blood, thus diverted from the head. After some time the abdominal manipulations were begun, with stimulating motions to the liver, but still strong *active-passive* motions were applied to the extremities. The bowels were soon brought into their normal state, and the head entirely relieved. After six weeks' daily application, the patient was freed from all those horrid symptoms which generally prognosticate a fit, and his bowels continued to be in an active and healthy state. Twelve months afterwards, the gentleman applied for another course of manipulation, not because he really wanted it, but because he found in his diary that he about this time of the year used to be cupped, and he therefore thought it better to have recourse to the therapeutic manipulation. I believed that he was quite right in his opinion; he therefore received four weeks' application. I frequently see this gentleman at his counting-house, and but for his grey hair, he is now more like a man of forty-five than bordering upon sixty, both with regard to activity and appearance.



CASE 5.—*Gout*. This was an elderly gentleman, who for many years had had his regular fits of gout. He applied in February, 1841, to have a course of therapeutic manipulation. As he was just in a fit when I first saw him, surrounded by pills of colchicum, diuretics and diaphoretics, I told him that I should not, until after the fit, apply the manipulations. When, after some days, he became better, the applications were chiefly directed to his abdomen, the kidneys, and the liver; the patient received thereafter daily rotatory motions of the trunk, for which purpose he sat on a stool, his knees and feet fixed, while the operator moved his body in a rotatory way. After these, lubricatory motions of the wrist, shoulder, and ankle joints, were given together with half active motions to the upper and lower extremities. After eight weeks' application he was considered well; and although now it is more than eighteen months since his recovery, this same person has not felt any return of the gout. I have reason to believe that he lives more sparingly, and in accordance with dietetic rules.

CASE 6.—*Paralysis*. This was a lady aged 38, of a nervous lymphatic temperament, and of a scrofulous disposition. She had, eight years before I saw her, begun to feel want of command over the fingers of her right hand, together with a constant feeling of numbness; and the disease had now gradually developed itself to a real hemiplegia. The arm was hanging motionless down her side, and the leg dragged after her; sensation seemed still to remain somewhat active, but her will had little power over the motions of the right side. The blood-vessels on the service of the right arm appeared narrow, and faintly marked from the long standing of the disease; and the pulse was weak and slow. The patient complained of tightness round her abdomen, like a rope drawn tightly; and she was always constipated, so much so, indeed, that she never was relieved but by using an enema, or strong aperient medicines. The diagnosis, as in all similar



complaints, was very difficult. The patient neither before nor after the beginning of the palsy, felt any pain in the head or spine. There were two great curvatures of the spinal column, which made me conclude that these might probably have something to do with her complaint. I began to manipulate the dorsal muscles; gave her constantly rotations of the trunk, while she was fixed, in a sitting position; applied lubricatory motions to all the joints; and I tried to rouse the nervous energy of the paralysed side, at the same time directing some applications to her abdomen. In three weeks she was able to raise her arm, her leg at the same time being considerably improved. Then the passive applications were alternately used, with more active ones; the former were multiplied to the highest potency, and she received now two hours' and a half daily application. Continuing this for nine weeks, she became very much improved; she was able to run up and down stairs with the greatest ease, and, as a proof of her arm being so much better, I will only mention that she was able to dress her own hair, an operation which required some exertion, and considerable command over the muscles of the upper extremity. Notwithstanding this, the finger points continued rather inactive for a long time; and as circumstances obliged her to return to the country, I am not aware whether she was able to use her needle, although she could use her hand in cutting and laying hold of various things. She returned restored to health in other respects, her bowels being active, her catamenia regular, and her command of the muscular motions of the arms and legs perfect. After a period of nearly seven years, I received last April, a note from this lady's sister of which the following is an extract:—

“Miss C—— presents compliments to Mr. De Betou, and will feel much obliged to him for his opinion whether the air of Blackheath, as a continued residence, would be likely to agree with her sister Sophia. She is in excellent health at



present, and under God's blessing upon Mr. De Betou's skill and kind attendance, owes the use of her hands and indeed of her limbs generally; though one hand is still deformed.

"STOKE GUILDFORD, April 17th, 1846."

CASE 7.—*Liver Complaint.* This was a gentleman, aged 52, who for a long time had suffered from liver complaint. Before the manipulations were begun, the disease had established itself in a real case of jaundice. The liver was hard and enlarged, and the patient suffered very much from the great quantity of mercury he had taken. The manipulations were directed to the liver and the whole right side. He was lying in a horizontal position, and the liver was raised by the assistant putting his hand under the last false ribs, while the operator applied vibratory motions in this region. Strong frictions were applied to the right side; the right extremities received frequently *half active* motions. After some weeks, the jaundice gradually disappeared, the colour of the evacuations was much changed, and the patient improved in health and spirits. By daily applications for two months he was entirely cured.

CASE 8.—Mrs. F. had suffered for a long time from disease of the liver. There was a great deal of enlargement of this organ, together with pain and feeling of weight in this region, and acute pain in the shoulder. Her head suffered constantly, and her bowels were in the most irregular state. By vibratory motions applied under the false ribs, together with half active motions for the oblique muscles and arterial motions to the lower extremities, she very soon begun to mend, and after two months considered herself perfectly cured.

CASE 9.—Mr. M., Jun., aged 26, complained of pain in the region of the liver, and great tenderness at the pit of the stomach. A hard tumour could also be felt on the convex side of the left lobe of this organ, and all these symptoms were accompanied with pain in the back, much weakness and debility, so much so that he fainted the first time the diagnosis



was performed. By application of pressure at certain intervals, the tumour soon became absorbed, at the same time that motions were applied both locally and generally, and after some time he got entirely well without using a grain of medicine.

CASE 10.—*Disease of the Heart.* Mr. F., aged about 46, with a good and robust constitution, had for some years suffered from pain and uneasiness in the region of the heart, together with a pain in the left arm. After having for some time received strong active motions for the lower extremities, which were applied to the patient in a sitting posture, applications of an absorbing nature were directed to his heart and chest; and the improvement, which was very gradual at first, became very manifest after two months' operation, shortly after which the patient left off the treatment, considering himself cured. He some time afterwards acknowledged his recovery in a note, from which the following is an extract :

“ Sept. 4th, 1845.

“ My dear Sir,

“ I have just received your note with minute, &c.

“ I beg at the same time to thank you for your kind attention on all occasions, and to assure you how very much I feel relieved and benefited by your treatment.

“ Very truly yours,

“ M. F.”

CASE 11.—This was a gentleman aged about 25, of a strong constitution. He had for a long time suffered from pain in the region of the heart, accompanied by an uneasy sensation along the false ribs of the left side, pain along the left arm, and frequent fulness in the head, sometimes so much that it was quite alarming. His bowels were also irregular, and he suffered often from flatulency. Here strong active motions were applied to the lower extremities, bringing all the groups of muscles of the thigh alternately into operation : first the extensors, after them the flexors, then the adductors,



and lastly, the abductors. The upper body of the patient being in perfect rest, and his back reclining against the back of a chair, these motions had always the effect of lowering his pulse, which would not have been the case if he had himself brought these muscles into play in a standing or walking posture: on the contrary, the effect would then have been an accelerated motion of the heart and a quickened pulse. These diverting motions were after some time increased to a still higher potency, by combinations of other muscles and change of position, and by these means a visible improvement soon began. In order then to hasten the cure and to produce absorption, passive manipulations were performed about the region of the heart, and within three months the patient was perfectly restored.

CASE 12.—*Chronic Headache.* Mr. ———, aged 29, had suffered for many years from severe chronic headache, which incapacitated him for all business. The pain was often so great that he became almost insensible, and on one occasion he went into a fit. By continued arterial motions to the upper and lower extremities, together with half active motions for the oblique abdominal muscles, the patient soon began to improve. Passive motions were then directed to the vessels of the cranium, and the tourniquet frequently made use of round the head. After six weeks' daily applications this patient was cured.

CASE 13.— This was a young lady who had suffered for many years from severe chronic headache. She was also very much troubled by her bowels, which never acted voluntarily, and often resisted the strongest aperient medicines. The course pursued was very similar to the case above, with this difference, that motions were introduced in her case, which affected the viscera of the pelvis, in order to give tone to the organs within this region, and applications were also made to make the bowels act naturally. After three weeks the patient got better, and by continuing the manipulations for some weeks longer she got entirely well.



CASE 14.—*Languid Circulation and Hypochondriacal Affections.* This was a gentleman of rather a weak constitution, whose circulation was very languid, bowels torpid, and who suffered from lowness of spirits, fear, and many imaginary complaints. Sometimes his affection was so bad that he was almost afraid of being alone, and his friends entertained great anxiety lest he should commit suicide. Although a severe case, the mechanical treatment was here quite in its place, and after a general treatment he recovered gradually, and got at last quite well.

CASE 15.—*Enlargement of the Heart, &c.* Mr. S., aged 45. This was a case of very long standing. The subject of it was a gentleman of sanguineous temperament, who had doubtless accelerated the constitutional mischief going forward by indulging in active exercises after a comparatively sedentary occupation. He had suffered for years, with more or less frequency and strength, from the following distressing symptoms; viz,—extreme anxiety, with occasional lividity of the lips and around the nasal orifices; sleepless nights, awaking often from frightful dreams with a choking sensation in the throat, which obliged him to leave his bed and walk about the room; coldness of the extremities, and great difficulty at times in maintaining the proper warmth of his body by clothing or otherwise; occasional vomitings, particularly after any slight indulgence at table; pulse uniformly slow and intermittent, pain in the region of the heart, combined with acidity by which he was often much distressed; vertigo and faintings; bowels costive and irregular. The treatment here was obviously of a passive nature at first, being applied more to the region of the heart, and to increase the circulation in parts remote from the seat of disease; this was followed by applications to the epigastric and abdominal regions, and lastly by more *active* movements to confirm the improving tone of the circulation and promote innervation of the system at large. After a short period of attendance, the



most distressing symptoms gradually subsided, the *sounds* of the heart became more audible, the *impulse* less, the pulse firm and without its former intermittent character. His general health being thus gradually restored, nights of calm and undisturbed sleep followed and were maintained; he was no longer troubled with palpitations and vomitings, and to the surprise of himself and friends became as it were a new man. With a more careful attention than formerly to his habits and regimen, he has experienced, excepting liability to colds, no recurrence of the old symptoms.

CASE 16.—*Affection of the Heart.* Mr. W., aged 25. This case bore symptoms somewhat similar to the foregoing, save that they were of more restricted character and of comparatively recent existence. The chief of these were palpitations, anxiety, disinclination towards active occupation, much distress after the slightest unusual exertion, accompanied with dull pains about the region of the heart. Applications of a like character to the foregoing were pursued for a few weeks only, when the whole of the symptoms gave way, and he has since followed the duties of an active profession without any return of them.

CASE 17.—*Enlargement of the Heart.* Mr. J. S., aged 37. This gentleman was of a lymphatic-bilious temperament, of temperate habits and placid temper. He had from childhood suffered from constitutional debility, while his system had latterly exhibited more decided symptoms of internal disease. On several occasions he had been subject to syncope or fainting after unusual bodily exertion, and when travelling abroad had been more than once overtaken by illness which proved nearly fatal. The more recent symptoms had been langour, anxiety of mind, sudden starts in bed, accompanied with violent struggles as if against some impending danger, costiveness, palpitations, and the usual signs of deranged circulation. The applications in this case were at first of a passive nature, active movements being introduced afterwards with due



caution. The result proved the perfect success of mechanical treatment in such diseases. After a few days the bowels began to act more regularly, the oppression in and about the thorax to cease, and the previous anxiety, together with disturbed rest which had so long afflicted him at night, to disappear. In a few weeks the recurrent palpitations were no longer felt, the sounds of the heart had become gradually more distinct and healthy, the intermittent character of the pulse gone, and the tone of the circulation so far improved that he deemed it necessary to discontinue the treatment. The operator has reason to believe that he has experienced no return of these symptoms since that time.

CASE 18.—*Morbid Condition of the Circulation.* Mr. G., aged 28. This patient was of a sanguine lymphatic temperament, of extremely temperate habits, and had resided some years in hot climates. He complained of a constant feeling of langour, difficulty of fixing his attention to matters in which he was engaged, want of confidence, restlessness at night, taste in the mouth on waking in the morning, fulness about the region of the heart with slight palpitations, at times a difficulty of breathing, eructations yielding momentary relief, acidity of the stomach, slimy dejections, cold extremities, slow pulse, and feeble action of the heart. The usual forms of treatment were decidedly successful in this case; he early experienced relief, and found his natural health once again restored to him.

CASE 19.—*Chronic Determination of Blood to the Head.* Mr. F., aged 42. This gentleman was of an active sanguine temperament, with considerable nervous development. He had lived several years in Portugal, many of which had been passed under distressing symptoms of some kind of derangement of the head and nervous system generally. Business requiring occasional visits to this country, he had hoped that each sea voyage would remove the complaint; but these served alone rather to increase it, and he at one time almost despaired



of recovery. A course of passive, and subsequently active applications, however, rapidly removed the cause of his malady, and he left to return to Portugal entirely cured.

CASE 20.—*Symptoms of Apoplexy.* Mr. M., aged 62. The subject of this case was of sanguine temperament and full habit of body, his mode of living generous, and occupation somewhat sedentary. The premonitory symptoms were confusion of ideas, occasional drowsiness, horrible thoughts, sense of fulness and giddiness, and in fact, of the common run of those which usually forewarn of a coming apoplectic seizure. He experienced from the first great relief from this treatment, relapsing only at intervals from causes which he attributed to the state of the atmosphere or to imprudent diet. Strong applications were ultimately administered to his bowels and to the abdominal muscles; these, combined with other active movements, produced a powerful absorption in the system, removing a large amount of fat which doubtless impeded the functions of several organs, and existed particularly about the intestines, and he left off cured of all visible tendency to this fatal disease, with a more healthy condition both of body and mind.

CASE 21.—*Congestion of the Brain.* Master H., aged 11. This youth exhibited a considerable amount of precocity of intellect, though his form was stunted and partially developed. He suffered also from a slight curvature of the spine, and a small degree of congestion of the liver, with feeble circulation. It having been necessary to remove him from school, in consequence of dangerous symptoms, the probable result of the excitement of his usual studies, he was placed under this treatment, which shortly not only removed the congestion of the brain, but restored the circulation to a more healthy tone, and gave similar development to his muscular system.

CASE 22.—*Tic Doloieux, combined with Inactive Liver.* Mrs. W., aged 45. This case was one of peculiar interest. The subject of it was of a bilious-lymphatic temperament, of



full and active habit of body. This lady had suffered more or less during a period of eight years from *tic doloieux* in the left side of her face, as well as from neuralgia in other parts, experiencing the most acute lancinating pains chiefly during the day, and at night an occasional presentiment of suffocation, with loss of voice and capability of rousing those who were near to her; also a feeling of oppression and spasm in the region of the diaphragm. On examination there was found considerable induration of the liver, which produced an inactive condition of the large and small intestines. She stated, moreover, that she had once been confined to a dark room for a period of six months, in consequence of the extreme nature of the neuralgic pains and the state of both organs of vision. After the first attendance of this patient, the *tic* was almost entirely removed by pressure, together with light frictions along the left eyebrow and under the eye. These were combined with active movements of the muscles of the neck, and secondly with stimulating applications to the liver and stomach, as well as attention being paid to the restoration of the system generally. The result of a persevering attendance at length was, an entire restoration to health; the neuralgic pains speedily disappeared, and the absorbing functions both of the liver and alimentary canal gradually assumed a healthy character.

CASE 23.—*Congestion of the Liver.* Mr. M., aged 28. This gentleman had just returned from China, and suffered greatly from acute pains in the region of the liver, increased by the slightest pressure. In a short time the evident congestion of that organ was entirely removed, and after receiving other applications with reference to the system generally, his health was fully re-established.

CASE 24.—*Abscess of the Liver.* Mr. S., aged 32. This gentleman was of a bilious temperament; had suffered for three years from acute and prolonged pains in the right side, accompanied with a sensation of weight in that region, which



he compared to a heavy lump hanging under the false ribs ; nausea, and sometimes vomiting after meals ; tongue furred, skin dry, complexion dark and sallow, his countenance assuming an expression of despair, urine thick, bowels highly constipated, sleep broken, pulse small and irregular, feet cold. He had been for a period of three years under medicinal treatment, but without deriving much benefit therefrom ; and, prior to his coming under the manipulations, had been advised by his medical attendant to relinquish all business, at least for a time. The treatment, which at the commencement was of the usual passive nature, was eminently successful. After a few days, he felt as it were revived ; his bowels began to act, the nausea and vomiting after meals to disappear, and his appetite became greatly improved. A few weeks subsequently, the heaviness in his right side entirely left him, his spirits became lighter, and he gradually recovered. He left perfectly cured ; and, with the exception of one week in the middle of the treatment, when he did not consider himself quite so well as usual, sleep had returned ; whilst his skin, the functions of which had long been dormant, now appeared of a healthy tone and colour.

CASE 25.—*Hemoptysis or Spitting of Blood.* Miss F., aged 19. This young lady had latterly been troubled with a slight cough and spitting of blood, together with costiveness of the bowels and derangement of the circulation. As she was otherwise of somewhat robust habit, with a form well proportioned and developed, the treatment soon succeeded in removing the causes of her distress, and in materially assisting towards an increased activity of the respiratory functions. The course was but short, and she left entirely cured.

CASE 26.—*Consumption.* Mr. E., aged 36. This patient was of a sanguine temperament, with great physical energy. The disease had been gradually acquiring strength during the previous seven years, but the symptoms had varied considerably during that time. It had been moreover checked in its progress by residence abroad during each successive



winter. He expectorated daily about half an ounce of mucopurulent matter, mixed with blood. He persevered with the treatment for some weeks, when he left to spend the ensuing winter at Malaga. His general health had greatly improved, and prior to departure, he stated that he had received the assurance of an eminent London physician, who had long watched his case, of a healing process having evidently commenced in the left lung.

CASE 27.—*Chronic Diarrhœa.* Mr. W., aged 29. This case afforded another striking example of the certain efficacy of these applications in diarrhœa or other derangement of the "portal circulation" and its branches. The subject of it had just returned from China, which part of the world he had been compelled to leave in consequence of increasing symptoms of gradual prostration of his entire system, and fearing a fatal result. The homeward passage had not, as was expected, removed the danger, or checked but slightly the progress of the complaint. Passive mechanical applications, however, to the abdominal region, in conjunction with active movements to the muscles of the back, speedily checked the ordinary symptoms of diarrhœa, the bodily emaciation gradually gave place to an increase of flesh, and this patient left perfectly cured to revisit his friends in America.

CASE 28.—*Affection of the Nerves of the Spine.* Mr. M., aged 56. Temperament sanguine-bilious. This gentleman had suffered for a period of three or four years from neuralgic pains in the back, chiefly across the shoulders, and at the inferior posterior angles of the scapulæ. He remained only about three weeks under the treatment, business demanding his return to the country, whence he subsequently wrote to a friend in London testifying to the relief he had experienced from it.

CASE 29.—*Deformity of the Chest.* Master M., aged 8. In this case the sternum or breast-bone was found to project considerably; the seven true ribs, meeting at a very acute angle, formed in a high degree what is vulgarly known as



“a pigeon breast.” After the usual muscular applications both to develop and expand the chest, he left entirely cured in about six weeks.

CASE 30.—*Muscular Deformity.* Mr. L., aged 50. This gentleman had long suffered from debility and atrophy of the gluteal muscles of the right leg. The case is only important as shewing how beneficial mechanical applications assuredly are in such instances, as a judicious treatment succeeded in restoring the failing limb gradually back to nearly its former vigour.

CASE 31.—*Lateral Curvature of the Spine.* Miss P., aged 19. This condition of the spinal column had existed for eight or ten years, though the curvature was not very considerable. The upper curve was traceable along the left side by the first four or five dorsal vertebræ, and the lower curve to the right of the lumbar region. The integument of the back was found to be in a state of great irritation, and the ankle joint of her left foot swelled occasionally, though her general health was tolerably good. By applications to the antagonist muscles of the weak side, the spine was effectually brought into its natural position.

CASE 32.—*General Debility.* Mr. H., aged 55. This also was a case of unusual interest. The patient was of a nervous-sanguine temperament. The chief symptom was general debility, which had continued to a greater or less degree for some years. He had been afflicted, at intervals of three or four months, with stomach pains, constant eructations, and occasional conditions of hæmatemesis; also faintings at stool, sudden attacks of desire to evacuate, but without the power of motion, when he was usually carried thither; had been accustomed to horse exercise, but had latterly denied himself that pleasure in consequence of chronic neuralgia of the knee-cap, from a blow sustained some years previously; his habits were decidedly temperate. A treatment suitable to his case lasted for about five weeks, when he left, declaring himself



to be perfectly well, the old symptoms being entirely removed, and with intention of visiting the Continent with his family for a short period.

CASE 33.—*Paralysis of the Face.* Mrs. W., aged 29. This complaint, accompanied with partial congestion of the liver and costiveness, had been of three years standing. The success of the applications was early manifest, and she soon experienced great relief from them, though from some cause or other her attendance was not sufficiently prolonged.

CASE 34.—*Indurated Glands.* Master M., aged 4. This child suffered from enlarged abdomen, proceeding from an induration of the glands of the mesentery; his bowels being costive and irregular, his system lax, and development evidently checked. He was perfectly cured in a short space of time.

CASE 35.—*Dyspepsia and General Debility.* Mr. F., aged 45. Of sanguine-bilious temperament. The symptoms were a quick and feeble pulse, great general debility, the least exertion painful and producing a cold, clammy perspiration over the entire body. Also, pain in the region of the liver, with tenderness of the epigastrium, bowels very much constipated, and the muscular system relaxed in the highest degree. Had long suffered severely from acidity of the stomach and other distressing accompaniments of derangement of that organ. The principal applications were, in this instance, confined to such as might promote a better circulation of the blood, and increase the innervation of the entire system. By these means he gradually recovered the tone of his bowels, the clammy perspirations disappeared, the acidity subsided, and in eight weeks he was perfectly restored.

CASE 36.—*Luxation of the Jaw, with Paralysis of the Muscles of the Face, &c.* Miss H., aged 39. This lady, of nervous lymphatic temperament, had been subject to the above distressing attacks for a considerable period, the usual medical treatment in such cases having failed to remove the cause of her malady, or restore the general tone of the system.



She experienced at times violent headaches, with nervous derangement, loss of voice, and evident symptoms of partial congestion of the facial nerve or a portion of the brain itself. As her general health was otherwise unimpaired, and the systemic disturbance of a local character, the manipulations were carefully directed towards the region of the mischief, in order to remove the tendency to congestion, increase the activity of the absorbent vessels of the head, and give tone to the muscles and ligaments of the affected part. The result was, that in a very short time she was perfectly restored, nor has she subsequently experienced any return of the former symptoms. The attention of the reader is especially directed to this case, as it evidences in the most striking manner the efficacy of a mechanical treatment to parts (suffering under the common effect of local fulness or determination of blood) which are accessible to the practitioner; and it is moreover important in the present instance, as a required period of two years, she informed Mr. De B., had been named by her previous medical attendant before the diseased part could regain its former vigour.

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The treatment of this patient has been with  
the most careful attention to the condition of the  
system at the time of the onset of the disease. It  
is not possible to say whether the disease is  
in its early or late stage, but the treatment  
has been directed towards the removal of the  
cause of the disease, and the relief of the  
symptoms. The patient has been kept in bed,  
and the diet has been restricted to the most  
easily digestible food. The treatment has been  
continued for some time, and the patient has  
shown some improvement. It is hoped that  
the patient will continue to improve, and  
that the disease will be completely cured.



