



58,113 / B Supp.



Digitized by the Internet Archive  
in 2019 with funding from  
Wellcome Library

<https://archive.org/details/b30508198>



A. C.

PLAIN and FAMILIAR  
INSTRUCTIONS

FOR PERSONS AFFLICTED

WITH

RUPTURES.

In which are given

DISTINCT NOTIONS of these MALADIES

And the most proper Means of curing them.

WITH

RULES and DIRECTIONS

ON THE

USE and APPLICATION

OF

TRUSSES.

---

*Stultorum incurata pudor malus ulcera celat.*

Hor.

To which is added

A DISSERTATION upon the Disorders of the  
URETHRA.

---

By GEORGE ARNAUD, of the Corporation of  
Surgeons in London.

L O N D O N.

Printed for the Author, and Sold by him at his House No. 1. in  
~~Martlet's Court, Bow Street, Covent Garden,~~ and at Mr.  
LACY's Pamphlet-Shop, at the Corner of St. Martin's  
Court, in St. Martin's Lane. 1754.

[ Price One Shilling and Six-pence. ]

*ing's Street St. Ann's, Soho*



## ERRATA.

- Page 7. line 19. after *modesty*, put , .  
P. 10. l. 37. read *treatise*.  
P. 21. l. 33. for *mothes's*, read *mother's*.  
P. 25. l. 36. after *because*, read *it is*.  
P. 28. l. 1. dele *may*.  
P. 36. for *Chap. X.* read *Chap. XI.*  
P. 42. l. 20. after *Secondly*, read *the patient*.  
P. 42. l. 29. after *re-entring*, read *if*.

**T**H E Motives which induced the Author of the following Dissertations to make them public, were, first, a sincere Desire of being of some Benefit to his Fellow-creatures in explaining the Nature and Symptoms of some Disorders which, for want of being generally known, and understood, are often attended not only with the most painful, but likewise with the most fatal Consequences: and secondly, the laudable Hopes of serving himself in a Profession of which, as it has been the whole Business of his Life to make himself Master, so he flatters himself, that his Labours have not been intirely to no Purpose.

As he was born a Stranger to England he could not reasonably hope to be trusted and employed in this Country, unless he was able to raise himself a character from his Works. --- To his Works, therefore, with all due Modesty, he presumes to appeal, both to the present Dissertations upon Ruptures, and the Disorders of the Urethra,

thra, as well as to the Treatise which he published some Time since upon the former of these subjects.

THE Author having ventured to translate his Thoughts into English himself, rather than to trust the Business to any other Person, who might not always so clearly understand the Force of his Expressions, he humbly begs the candid, indulgent, and judicious Reader to attend to his Meaning, rather than to expect Exactness of Stile.



---

---

# DISSERTATION

ON

# RUPTURES.

---

INSTRUCTIONS *to Persons afflicted with Ruptures.*

**T**HOUGH ruptures are far more frequent than is commonly believed, yet there is no species of disorders with which the public is hitherto less acquainted. Most persons are prompted by a principle of curiosity to form some general ideas even of the least common diseases, without giving themselves the smallest trouble to study them. They reason and talk concerning them in daily conversations, form a judgment of the capacities of various physicians, extol the skill of one, and as much depreciate that of another; nay, what is still more, they

B

think

think they have a right to criticise on the most abstruse medicinal productions.

THESE things are far from being inconsistent with the general welfare of the human species, when they do not tend to obstruct and frustrate physicians and surgeons in the rational and methodical treatments of diseases. If physic and surgery were made an easy and amusing study, it would be in the power of every one to reason with exactness, to judge with discernment of the capacity of physicians and surgeons, and to read their works with sufficient knowledge. Every man has, no doubt, an uncontroverted right to be his own physician. But no one can have any privilege to practise in that capacity on others, without having acquired a competent knowledge of diseases. Why, then, do not people take more pains? Men, from some cause or other, often give themselves a great deal of labour to acquire particular branches of knowledge, intirely foreign to their state and condition in life; but every one pretends to be a physician, without taking the smallest care to obtain a due acquaintance with diseases. Nothing, however, ought to be thought of more importance than the study of medicine, since all men are, more or less, subject to diseases. Besides, no branch of knowledge affords a more noble and exalted pleasure to the human mind, than the study of the animal œconomy, without which no acquaintance with diseases can possibly be obtained. This, among all other parts of literature, is at once the most curious and the most necessary. Man, who is the principal object of its researches and discoveries, is blessed with a degree of excellency superior to that of the other works of nature, how perfect soever in their respective kinds. Why, therefore, do not people make it their business to know the structure, order, and the uses of the several parts of which the human machine is composed? Some perhaps will remonstrate that the study of anatomy is disgusting; but, on  
sup-

supposition that this was true, yet the obligation we lie under from self-interest to know our own frame and make, ought to surmount and counter-balance all those offences against our natural delicacy with which the study of this science may seem to be accompanied. Besides, every person is not obliged to operate with his own hands. The draughts of the several parts from the greatest masters, and every where to be found in their works, set those ideas in a clear light, which a simple reading might have left obscure and perplexed. Furthermore, wax-anatomies, carefully and accurately prepared, would be almost sufficient to form masters in anatomy, but they were neglected because we had them in our possession. When these waxen figures were at Paris, some persons of taste and genius thought it worth their while to take a journey thither, in order to satisfy their curiosity; and, since they have been at London, Frenchmen have come on purpose to see them here; for the future those that desire to see them will be obliged to travel to Ireland. It is an unaccountable failing in the human mind to desire chiefly such things as it has not, for the present, within its reach. But if it should be objected, that, it would only imbitter the pleasures of life, if we were acquainted with the delicacy and fineness of the parts on which our being and health depend, and that we should be continually forming the hateful idea of a quick approaching death; I answer, that this would by no means happen, since we should rather learn, on the contrary, to spare and preserve these parts, and avoid the means which, without being sensible of our folly, we continually employ to destroy them. How many great and ingenious men have, notwithstanding the weakness of their constitutions, arrived at extreme old age, who, without this so necessary knowledge of anatomy, would have died in the very flower of their youth? By means of this knowledge

of the animal œconomy every man would be in a condition to study his own constitution, to observe the changes which happen to it, to guard against every thing that might prejudice it, to discover the causes of diseases, to know their principal differences, symptoms, and signs, and, in a word, when he should be seized with any disorder, he would be able to give a just account of it to his physician, who, for that reason, would be better able to know what to do immediately; whereas he is often obliged to spend the first days of the disease in investigating its nature and species, studying the constitution of the patient, and forming the most proper plan for his proceeding in the course of the cure.

MEDICINE and surgery would be so far from sustaining any loss by these means, that they would reap considerable advantages from them. The public becoming more knowing, would perhaps be in a condition to make some happy discoveries\*. They would form judgments of the dangerous and intricate complications of diseases: they would be witnesses of the contrast or contrariety between the indications and contra-indications in diseases: they would not so rashly impute to the most skilful and judicious practitioners in the art of curing supposed faults and errors, of which they are by no means guilty: they would be forced to do these men justice by admiring those masterly strokes of practice, which are often

\* Persons, whose genius has a turn to the study of physic, have discovered remedies useful to the human body, that the physicians have adopted in their practice. Without Lord LAGARAYE, a French Count, we should not have known the *fixed-hydrolie salts* of herbs, for the discovery of which the king was pleased to grant him an honourable gift.

The use of *soap* was not so generally known in physic, till Mrs. STEPHENS found it by her happy experience for the stone in the bladder, and the gravel in the kidneys, which was so esteemed that the parliament gave her the sum of five thousand pounds for her remedy.

highly laudable: and they would be able to judge of the true causes of death, which are sometimes insurmountable.

It is otherwise with respect to ruptures than with most other diseases: for though the people have some superficial idea of the common disorders of the body, yet the name of rupture is hardly known among the vulgar, and much less among persons of note and distinction, who ought to have a more extensive knowledge and comprehension of things.

THE general cause of the small acquaintance people have with disorders of this kind, is owing to a circumstance peculiar to these disorders; namely, their having this circumstance peculiar to themselves; that by attacking either the parts of generation, or those adjacent to them, they give a harsh and disagreeable shock to that vanity and self-love which prevails but too much in the human breast. For this reason the fair sex weakly imagine, that these disorders carry with them a sort of obscenity, which too grossly offends the modesty of their sex; and therefore they do not care to talk of them. This is also the particular reason which hinders some from being instructed with respect to the true character of these disorders; and which, by making others decline the assistance necessary for their relief, forces them to conceal their infirmities within their own breast. With respect to men, a great number of these imagine that such of their own sex as labour under this disorder, are incapable of performing the most common duties of life; so that most men avoid speaking of them: whereas those who are really afflicted with them, not daring to consult able surgeons, who deserve to have an entire confidence reposed in them, remain ignorant of the disorder, and inactive with respect to its cause. The more vulgar and indigent people being incapable of reasoning on these diseases, and not in a condition of procuring the necessary means of relief,

struggle through the remains of a languishing and miserable life, under the weight of their calamities. Families, cities, and even kingdoms, are sometimes almost universally afflicted with ruptures, without ever so much as thinking on the means of curing them. The patients are deplorable victims of that neglect and contempt, into which the masters of the art have suffered these disorders to fall. Surgeons leave the treatment of patients afflicted with ruptures to common workmen, whose measures prove mortal to an incredible number of their fellow-creatures, as I have shewn in the preface of my larger work on these disorders\*. These men, incapable of making the smallest discoveries in the nature, or improvements in the cure, of these disorders, have greatly injured and depreciated, in the esteem of others, those from whose skill real relief might be expected: so that this part of surgery is fallen into so great a discredit that every man who professes himself a surgeon for ruptures is looked upon as a quack: but this prejudice would be dissipated, if all those who assume this character were able and skilful surgeons.

ON account of the great trust with which the public has honoured me, I think it my duty, in point of gratitude, to supply them, by way of instructions, with a general knowledge of these diseases, and of the

\* Those who desire a fuller account may be satisfied by providing themselves with the complete edition, in a large volume 8vo of this work, intitled, *a Dissertation on Hernias, or Ruptures*, sold by A. MILLAR, bookseller, opposite to Catherine Street in the Strand, London, in which all the tricks of the quacks are revealed: the anatomical dispositions of the parts concerned in ruptures are explained: the remedies proper for all cases are described: and a great number of observations on various and extraordinary cures are related. The author has also published *a Dissertation upon Hermaphrodites*, (with copper plates) relative to the same subject.

means of preventing their symptoms. It often happens, that a patient is in the greatest agony, when surgeons come to his relief, and that he dies by a neglect to employ the first remedies seasonably. I have seen numbers die, some through an ignorance of their condition, others from a delicacy inspired by modesty †; others confessing their misfortune; others for having been in country places, far distant from the towns where the necessary means of relief were to be had, and the greatest number for want of having due care taken of them. As every one will have it in his power from this work to know these disorders, together with their symptoms, and the methods of removing them, so no person for the future ought to alledge his ignorance as an excuse for his negligence. When it is known that these disorders are common to every body, that a sagacious and skilful surgeon can remove them, without offending against the strictest laws of modesty. and that it is his interest to keep the secret, people will become less scrupulous in seeking for the means of relief, and with an entire confidence commit themselves to his care. Those who are too far distant to have the necessary assistance soon enough, will know what remedies are to be used, while they wait for the arrival of a skilful surgeon, whom patients sometimes cannot find but at a great distance. This interval of time, which is always precious, will be employed in using the proper remedies, which I shall carefully specify, when it is known that the whole success of the best methods, which the most skilful surgeon can put in practice, depends on the good use which has been made of the remedies indicated in the beginning of the disorder. I have a fresh instance of this. A gentlewoman from *Bath* who lodged in the house of Mr. *Davy*, in *Beaufort Build-*

† This reason induced me to instruct in that branch a gentlewoman to attend the ladies, on account of the reluctance with which they intrust themselves to men.

*ings* in the *Strand*, was afflicted with a strangulation of the bowels at six o'clock in the evening, *August 18*: She passed the night without knowing the cause of her disorder, which made her suffer the greatest agony that it is possible to express; but she was saved by the due care of Mr. *Levit*, a skilful surgeon, who knew the case, and applied the proper remedies to it, till he had time to send and advise with me: at my arrival at 8 o'clock in the morning the day after, I found her near expiring; but as the preparatory remedies had been used by Mr. *Levit*, I was so happy to deliver her *extempore* from the Jaws of death.

PATIENTS may even in some cases be cured by the sole use of these remedies, without having any occasion for manual operations, I have frequently found patients cured, when I arrived at their habitations, in different provinces, whither I was called to their relief. The prince of *Talmon*, at that time upon his own estate, about 300 miles from *Paris*, sent to me in the year 1739. I being in the country, Mr. *Le Dran*, an eminent surgeon went in my stead, and had the satisfaction to find the prince cured, without any other means than the use of the method I had prescribed to him, in case he should be surprized by any discouraging symptom. A great many charitable persons, who, in country places, employ themselves in relieving poor patients, have preserved from death numbers of those who would otherwise have died, had not the means which I prescribed them been applied in such occasions, when these disorders called for a speedy assistance. These benevolent persons desired that I would give them a course of connected and rational rules, for the treatment of their patients. They perceived how dangerous it was to subject themselves to simple formulas, which are always no less trifling than fallacious when applied without judgment; they having often remarked,

that



that such remedies as in particular cases had been efficacious, in others proved very prejudicial, and even mortal.

THE instructions with which I now present the public, are the same which I formerly began to compose for the benefit of the poor, and having in the preface of my larger work given the reasons for my devoting myself to their service, I shall here add the following reflections in their behalf, since these corroborate and strengthen the desire I always had to fulfill my engagement upon this head.

THE poor are in a state almost the same as shades in a picture : they form a necessary contrast, under which humanity sometimes groans, but which does honour to the views of Providence. No doubt, the vanity, the ambition, and the caprice of men first established the grievous distinction between them and the rich, but in the present state and condition of things, it is proper and expedient to support and preserve this distinction. 'Tis therefore requisite there should be poor people, but it is by no means necessary that any should be miserable. The latter are a deplorable reproach to humanity ; whereas the former enter as so many useful members into the political œconomy of the best governed states, in which, by the labour and industry of the poor, abundance reigns, all the conveniencies of life are found, and the mechanic and more servile arts are improved and made to flourish. Do not so many considerable advantages arising from the poor loudly call upon us to supply them, at least, with what is necessary to enable them patiently to support the pinching hardships of their condition. The public interest, and even humanity itself, dictate lessons on this subject, so moving, that a person of the smallest degree of tenderness of heart, can never withstand their force and energy. Founded upon this principle, their necessities were always the rules of my conduct with regard to them : at any hour

hour whatever they are always welcome to me; the public is my witness that I have never refused to go to relieve them in their illnesses.

This work being adapted to the capacity of charitable persons, and consequently advantageous to the poor will, for that reason, be so much the more beneficial to every body; and for this purpose I have made it my principal business to render it clear and distinct, by avoiding the hard and uncouth terms of the art, and making use of common expressions, and such as every body can easily understand. I have given the true character of ruptures, their different species, their distinguishing signs, the various symptoms which appear in them, and the true rules which the patients should observe, with precepts for the application and use of trusses, with which I hope those who stand in need of them will have reason to be pleased. In a word, I have done all I could to render this work useful, and executed my design in such a manner, as that the most ignorant may reap from it all the advantages and assistances requisite for the cure and removal of their infirmities.

But as it is not possible to obtain a sufficient knowledge of these diseases, without having previously a general idea of the parts affected, I thought it proper to give in my larger work, a plain account and description of the parts of the belly, and those of generation which have the greatest connexion with these disorders.

As it is almost impossible to devote one's talents to the use of the public, without occasioning jealousy in some persons, I shall take this opportunity of answering those, who without regarding their own characters, have ventured their credit by vilifying, and absolutely denying, the possibility of the extraordinary cures related in my former treatise upon this subject, tho' they are proved by the most respectable witnesses.

THE III<sup>d</sup> observation, p. 292, of my dissertation upon the ruptures, was one of those which was most generally contested by the gentlemen of the profession in *London*: but the affinity this observation has with the following case of a gentleman whose high station in life does not permit me to name him, will, perhaps, make good that particular and contested case: among several witnesses which may testify this cure, Mr. *Watson*, an eminent apothecary and fellow of the Royal Society in *London*, as well known by his probity, as by his learning, seems to me to be sufficient to testify the truth of this.

IN the year 1749, the patient, then about 60 years of age, had a rupture from his infancy, which having always continued increasing, was almost as big as his head. That rupture which, for 16 years together, did not return into the belly, was looked upon as incurable (in consideration of its contracted adherences) by Mr. *Chefelden*, whose decisions were most often prevailing and right. The patient having then no hopes of any relief from his disorder, bore with all the resolution and firmness of a man of sense, the most grievous symptoms of this disease. He was tortured by continual gripings of the guts, bad digestions, frequent swimings in the head, and by a very troublesome, frequent, and involuntary provocation of making water. The penis entirely concealed in the excessive bigness of the swelling, caused new troubles every time the patient wanted to make water. Believing that the strangury was occasioned by some disorder in the passage of the urine, he had recourse to Doctor *Plunckett*, who had then the first rank among those who treated the diseases of the urethra. Dr. *Plunckett* probed the urethra, but found no obstruction in it; he felt but one opposition made by the parts contained in the scrotum. The Doctor, who had been witness of some particular cures that I had done in that sort of disorder, advised the patient to  
that

put himself under my care. The 15th of July 1749, I was called in consultation on that case with Dr. *Plunkett*, and Mr. *Watson*. I found by an exact search of the disease, that it was a rupture composed of some part of the caul, of the guts, and of the bladder. I explained, by the misplaced parts, all the symptoms with which the patient was vexed. So great a quantity of bowels lying in an unnatural place, it was impossible that it should not but be extremely painful to him, and from hence proceeded the cause of the gripings: the lengthening of the caul had forced the stomach to come down, and by this misplaced part the digestions were imperfect, and troublesome to the patient; the greatest part of the bladder lying in the scrotum, the lesser part of it which remained in the belly\*, contained but a small quantity of urine, and obliged the patient to make a little at a time, but very often; the constraint of all these parts slackened the motion of the blood in the belly, which caused it to return in a greater quantity in the brain, and gave occasion to the swimmings in the head to which the patient was subject; the total disappearing of the penis was explained by the excessive bigness of the swelling that hid this substance, and destroyed its figure. I proposed to the patient to cure him of all his disorders and of the rupture together; but this proposition seemed to him and his friends to be a paradox: but after having demonstrated the possibility of it to them, by alledging the instance of the III<sup>d</sup> observation, p. 292, of my dissertation upon ruptures, they were convinced, and the patient directly resolved to follow all that I prescribed. The 13th day of the treatment I put up the rupture, and nothing preternatural remained in the scrotum, to the great sur-

\* Speaking to the gentlemen of the profession, I should say, *bason*.

prize of the patient, and of his friends. I kept the parts in their proper place by the means of a convenient truss, and all the symptoms vanished away immediately after: the bladder received strength by little and little to contain the urine, and after some weeks the patient was able to keep it five or six hours, and he never enjoyed so good a state of health as since that time. Notwithstanding he has always made use of the truss since that operation, I may affirm it is more by prudence than necessity, for indeed I have been tired with soliciting him to quit it.

THIS is the only answer that I give to those persons who would willingly have ruined my credit; but, instead of that, have given me much more reputation, by putting it in my power to vindicate myself, both to the public, and to them.

I STILL insist that I have not made use, in that second case, of any other means than those laid down in the III<sup>d</sup> observation, p. 292, and Mr. *Watson* can affirm, that he both exhibited and administered the same medicines to the patient: and the public may be convinced that my principal view is to be as serviceable as I can to my fellow-creatures.

DURING the time of printing this essay, Mr. *Watson* above-mentioned is witness of a like operation (attended with nearly the same circumstances) of a person too eminent to be named publicly.



---

---

PLAIN and FAMILIAR  
INSTRUCTIONS  
ON  
RUPTURES.

---

CHAP. I.

*Of Ruptures in general.*

THE DESIGN **T**HE intention which I have of  
OF THE WORK. giving instructions to persons  
afflicted with ruptures, necessarily obliges me to en-  
ter into a short detail of the character of these dis-  
orders, their differences, their causes, their signs, and  
their symptoms, in order to arrive at the knowledge  
of the means proper to guard against, or cure them.

WHAT A RUP-**R**UPTURES are tumours or TURE IS. swellings formed by the issuing forth of certain parts contained in the belly.

The parts contained in the belly are the caul, the guts, the stomach, the liver, the spleen, &c. the parts which serve to contain those, are the skin, the fat, and the muscles; these last have five natural apertures, which permit the exit of the guts and caul. All these parts are exactly explained in the anatomical exposition, Sect. I. of my book, cited in the preliminary discourse.

**DIVISION OF RUPTURES.** Ruptures are divided into true and false.

**TRUE.** True Ruptures are such as are formed by the coming forth of those parts contained in the lower belly.

**FALSE.** False Ruptures are tumours or swellings formed by the collection of the blood, the lymph, or other humours, in the parts where true Ruptures happen.

**DISTINCTION OF RUPTURES** Ruptures are distinguished according to the parts of which they consist, and the places which they possess.

**DIFFERENCES ACCORDING TO THE PARTS.** They differ among themselves on the score of the parts of which they consist; some being formed by the guts; others by the caul; and others, again, by the guts and the caul together.

There are also some Ruptures formed by the stomach, and the bladder (which happens rarely); others by the ovaries, and the womb passing thro' the openings, in the bending of the groin; (but these sorts of Ruptures happen still more rarely :) and so, without insisting on a particular detail of them, which would throw confusion into the discourse, I shall only mention those produced by the gut and the caul. It should be too necessary to speak of the relaxation of  
the

the womb, of its inversion ; of the inversion and prolapsus of the fundament, but it is not possible to treat of those in so short a specimen ; these are explained at large in Sect. II. Part I. of my book.

DIFFERENCES OF RUPTURES, ACCORDING TO THE PLACES. The true Ruptures differ among themselves, from the places they possess ; in that some happen in the navel ; and these are therefore called Ruptures of the navel : others in the groin, and these are called inguinal : others, in the bending of the thighs, and called crural : Others, again, are formed in different parts of the surface of the belly, and called Ruptures of the belly.

There are, besides, other Ruptures which happen in other places, and which, for that reason, differ from these others ; as some happen in the loins, others in the vagina ; others, again, which are formed at the holes at the bottom of the hanch-bones ; but I shall wave speaking of all these different sorts of Ruptures, as they happen but very rarely, to engage our attention here ; these extraordinary cases claiming only the attention of the people of the profession.

It should be here the place of speaking of the false ruptures, but, to avoid confusion, I refer to my book, chap. xxix, persons concerned in these cases.

## C H A P. II.

### *Of the general Causes of Ruptures.*

WHAT A PHYSICIANS call causes of disease is. **P** causes every affection against nature, which produces, or which concurs to produce, diseases. The causes of Ruptures are divided into remoter or primitive, and into proximate or determining.



**REMOTE CAUSES.** The remote causes are those which arise from the temperament or constitution, which the patients bring with them into the world, or from the disposition they acquire by their manner of living. It is not to be doubted, but that children ordinarily enough inherit the good or bad qualities of the soul and body of their parents; so that there is nothing more certain, than that robust parents produce strong and vigorous children; and the delicate, children of the like delicacy of constitution with themselves; the gouty, gouty; and the phthifical, phthifical, &c. And those who have Ruptures commonly produce children with the like indispositions with themselves; consequently the most remote causes of Ruptures may be traced up to the disposition which is communicated to the child at the moment of its conception.

**PRIMITIVE CAUSES, WHENCE THEY MOST COMMONLY PROCEED.** It is much more common to find the primitive or remote causes of these diseases in the manner of living. All the parts which are contained in the belly, and all those which form it, are naturally softened and relaxed by the too moist air which is respired; by the marshy places which are inhabited; by the too relaxing aliments that are used, as the too thin milk of a nurse of a bad constitution; by the oil, the butter, the too great quantity of water, small-beer, and other the like drinks.

**DETERMINING CAUSES.** Every thing that is capable of determining the parts, already relaxed, to come forth, is considered as immediate causes of these disorders. Loud crying, leaping, straining, constipation, pregnancy, and child-bearing, force the parts contained in the belly to stretch, and come out at those places where they happen to find the least degree of resistance. It will be found a fuller account of the causes of Ruptures in the large edition, Chap. 4.

## C H A P. III.

*Of the signs of true Ruptures.*

WHAT A **T**HE signs in diseases are sensible SIGN IS. **T** marks, which discover, and distinguish them from each other. Some of them discover the present state, the character, and the species of the disease; and they are called diagnostic. Others again enable us to judge of the issue of a disease; and these are called prognostic.

DIAGNOSTIC SIGNS OF RUPTURES. The diagnostic signs, common to all true herniās or Ruptures, differ according to the progress of the disease. When the Rupture is just about forming, the patient feels a small pain, like that of an excoriation, or ruffling of the skin, and that within the belly; when the Rupture increases, the patient perceives, on applying the hand, a small swelling, which disappears upon pressing with the finger: when entirely formed, cholical pains are from time to time felt in the part of the Rupture, and which extend to the parts about the navel. The diagnostic signs, common to all the species of true herniās, do, besides, discover what parts they consist of, whether of the gut, or caul, or of both together. Those consisting of the gut are known by a small rumbling noise caused by the wind and the fluid matters contained in the gut, which rumbling is heard, especially, upon handling the Rupture, in order to procure its return. Those formed of the caul discover themselves, upon the touch, by a doughy resistance, like what we feel, when we come to handle a piece of tripe. In those formed of the gut and caul together, these signs are mixt, that is to say, they are found combined.

PROGNOSTIC SIGNS OF RUPTURES. In regard to prognostic signs, it may be said, in general, that Ruptures are very troublesome disorders, when they are neglected, and come to be attended with symptoms: Those formed of the gut are more dangerous than those formed of the caul; those happening in the navel, and in the surface of the belly, more difficult to cure than those called inguinal; and those happening in the bending of the thigh, are, of all, the most difficult of cure.

In fine, all of them are so much the more difficult to cure, as they are of an older standing; consequently less so in children.

---

## C H A P. IV.

### *Of the symptoms of Ruptures.*

WHAT A SYMPTOM IS. **S**YMP TOM is an accident, or an effect of the disease, and which disappears when the cause ceases.

STRANGULATION. Of all the symptoms of Ruptures, that of the strangulation is the most formidable and dangerous, and against which patients should be most on their guard, either in preventing it, or seeking out the means of cure, and using them instantly upon this symptom; never so little neglected, it is impossible for the expertest surgeon to remedy it. The death of the late Queen is too sensible an instance of this truth, not to be capable of striking every patient; for who could procure better means of assistance than she upon this melancholy occasion?

WHAT STRANGULATION IS. By strangulation we understand a degree of straitening, which happens thro' the strong compression of the parts thro' which

the gut passes, and which no longer suffer it to return into the belly. In this case, then, the gut is strangled, and this strangulation cannot happen without two other symptoms extremely easy to be understood; the first is an inflammation; the second, an impediment to the passage of the feces into the gut; from whence it necessarily follows, that the feces must return by the mouth, by throwing them up, if the return of the gut into the belly be not procured, for the feces to take their ordinary course by the fundament.

Tho' sometimes it happens, that it is not above five or six hours before the feces return by the mouth; yet this is not so commonly the case: The vomiting comes on for the most part on the 3d or 4th day; sometimes not till after 8, 9 and 10 days; but the patients are afflicted with such symptoms, as by preceeding the vomiting, announce and characterize the strangulation of the gut so distinctly, that every one who will but attend, can never mistake the case.

Here follows the detail of the symptoms.

FIRST, The Rupture grows bigger than ordinary.

SECONDLY, Causes much pain.

THIRDLY, Baffles all attempts to reduce it.

FOURTHLY, The pain extends as far as round the navel, if the Rupture be in the bending of the thigh; if in the navel, the pain, beginning there, extends to the groin.

FIFTHLY, The pains called gripes hold only for some minutes; but recur from time to time, and the disorder they cause, is hourly increasing.

SIXTHLY, Upon these gripings comes wind, which is plentifully discharged at the mouth; the patient cannot discharge it by the fundament, notwithstanding all the inclination he seems to have to do it by that part.

SEVENTHLY, The patient is troubled with loathings, or an inclination to vomit, which terminate in a plentiful salivation, thick and glutinous.

EIGHTH-

EIGHTHLY, At last the patient throws up the aliments, then come the feces, whose taste and smell are extremely nauseous.

During the series and increase of the symptoms, the Rupture swells, the belly turns hard, and very big, a fever comes on, and heightens more and more.

But, on the close of the distemper, the vomitings slacken, the patient is afflicted with hiccups, the belly subsides, and becomes insensible, the Rupture turns soft and livid; the sight fails; the pulse turns intermitting and languishing, at length is totally lost, and the patient dies for want of having foreseen the means of guarding against a death he might have avoided.

ADHESIONS, Ruptures are, besides, subject to another symptom, called adhesion; 'tis an union, which is made between the parts coming out of the belly and those without it, as the fat and the skin, &c. The parts which are attached externally, can no longer return into the belly, without a particular skill of a surgeon.

But how should we avoid a danger unknown, how guard against these symptoms, if we are uninstructed about them? Possibly 'tis only by reading; and to render it the more useful, I propose to describe each species of Rupture in particular; after which I shall communicate the means to guard against, and remedy them.

---

## C H A P. V.

### *Of the Ruptures of the Navel.*

EXPLANATION OF THE PART. **T**HE navel, is a hole destined to give passage into the belly of the infant, during its stay in the mothes's womb,

to what we call the navel string. It consists of three sorts of vessels; namely, a vein, two arteries, and a canal called urachus: This string is a continuation of the vessels which form the after-birth which after-birth is attached to the bottom of the womb. By means of the vein, which is a part of this string, the blood is conveyed from the mother to the child, for its nourishment and growth: and the blood returned back to the mother by the intervention of the two arteries.

The urachus is a canal coming from the bladder of the child, for relieving it of the urine, by conveying it into the blood of the mother. When the child comes to the world, this string is tied up with a thread, and cut, to prevent the flux of the blood of the child; so that the hole of the navel is filled by the navel-string, yet imperfectly enough, as it afterwards comes to shrivel and dry.

**CHARACTER OF THE DISEASE.** When we happen at any time to strain much, the gut or the caul easily comes out at the hole of the navel, because there a less degree of resistance is found than any where else.

**DIFFERENCES AND CAUSES.** The Ruptures of the navel are not only formed at the hole itself of the navel, but some more commonly happen at the circumference of this hole, because these parts are very weak, and easily dilated by any violent efforts, or gentler efforts often reiterated. Women are very subject to this species of Rupture. The reason is, that, in pregnancy, the belly is extremely extended, the hole of the navel enlarged more than in the natural state, or that its circumference yields and gives way more easily than all the other parts; because, as was said, the circumference of the navel is weaker than the navel itself.

**DIAGNOSTIC SIGNS.** The swelling and elevation of this part is the characteristical mark of the Rupture,

ture, especially if this swelling disappears when abed, or when pressed with the fingers.

**PROGNOSTIC SIGNS.** In general this species of Ruptures is very difficult to cure: The small ones, and recent, are more dangerous than those of a longer standing; but these of a longer standing are of more difficult cure. These diseases are very dangerous in children; but more easily cured than in persons of an advanced age.

**SYMPTOMS.** The Symptoms of the Ruptures of the navel are the same, in general, with those in all the other species of hernias. One, peculiar to and common in them, is a species of slight colic, less painful than troublesome, which the patients are incessantly afflicted with when up, and which encreases after eating.

**CURE.** The Art of surgery supplies three different means of cure for this species of Rupture. The first is what is called the palliative: The second, the radical; and the third, is the means of remedying the symptoms.

**THE PALLIATIVE CURE** is that by means of which we only attempt to prevent the symptoms, by keeping the parts in the belly by bandages or trusses, which exactly close up the hole, at which the parts come out, and hinder their coming out when once returned into the belly. This method of cure suits the hernias, accompanied with inconveniencies, which oppose their radical cure, as those of too old a standing, those of too considerable a bulk, and those happening to women who are subject to have children.

**THE RADICAL CURE** is that by which Ruptures are cured by the remedies proper in these diseases; of which I shall speak in chap. xiv; as in chap. ix. of the means of removing the symptoms.

## C H A P. VI.

*Of the Rupture of the groin.*

EXPLANATION **T**HE Author of nature has so OF THE PART. disposed the belly, that there are two holes, which answer to the parts, called the groin. These holes are destined to give passage from the belly on each side in men to the Testicles's vessels, in women to a species of round string, called from its figure, the round ligament of the womb; it serves to keep that part in its place. The holes, thro' which these ligaments pass, are, from their figure, which is nearly round, called rings. In the natural state, these holes are filled by the parts which pass thro' them; but upon violent strainings, they enlarge gradually, and at last give passage to the gut or caul, or to both together, out of the belly, and suffer them to form the Ruptures of the groin; they are called inguinal Ruptures.

DIFFERENCES. The Ruptures of the groin are different, and have different appellations according to the place they occupy. Some remain in the bending of the groin; these we call incompleat; Others descend to the sack in men, or to the great lip of the natural parts in women; and these are called compleat.

CAUSES. The particular cause of inguinal Ruptures proceeds from the rings being situated in the lowest part of the belly, which are continually relaxed by a certain quantity of water found at the bottom of the belly; If then the determining causes come to act, these parts being naturally open, and situated in the lowest part of the belly, the guts or the caul insinuate easily into them.



The determining causes are, loud crying, leaping, the strainings made to cough, at stool, in child-bed, &c.

The neglect of remedying the incompleat Rupture of the groin is the most immediate cause of the compleat Rupture; for if its progress be not stopp'd by bandages, it is natural to think that it must daily encrease more and more, and arrive at that pitch, that all the guts shall come down to the great lip. Nothing is more common than such sorts of Ruptures. They are sometimes observed of the bigness of one's head, and hanging down to the middle of the thighs.

**SYMPTOMS.** The parts which ought to continue in the belly, which is their natural place, cannot be thus disarrang'd without this consequence, a considerable disorder in the state of the health; for the guts cannot come down so low, and the stomach at the same time not be pulled down and displaced. As the guts are a continuation of the stomach, it then but imperfectly performs the digestion of the aliments; the patients are afflicted with windy cholics; the twitchings, to which the guts, the stomach, and other parts contained in the belly, are subject, cause almost continual weakneses, which are improperly ascribed to the cravings of hunger.

It rarely happens, that these large Ruptures are subject to strangulation; but should that happen, it is ever with the most imminent danger.

The incompleat Ruptures are rarely subject to the symptoms above described, yet more than the others subject to strangulation; because the rings, not having lost their spring, as in the compleat Ruptures, are more in case to make an impression upon the parts, and hinder their return, which constitutes the strangulation. It is, besides, true, that it is easier to guard against their strangulation, because easier to keep them in with bandages or trusses.

**DIAGNOSTIC SIGNS.** The incompleat Rupture of the groin is distinguished by its facility of coming out and returning again, when not adherent, and by the signs of the compleat Rupture.

The compleat Rupture is also distinguished by its facility of returning again, when not adherent: If adherent, that is, if attach'd to the exterior parts, and formed of the gut, we feel in it a certain degree of flexibility, like that which is felt on compressing a bladder not quite full of water: If the Rupture be formed of the caul, on the touch we perceive a softness, like that we feel in handling a piece of tripe. If the Rupture consists of both these parts, the signs are then mixt; we feel in handling the tumor, that flexibility, and at the same time, that softness just now mentioned.

**PROGNOSTIC SIGNS.** We may affirm of the Ruptures of the groin, that the incompleat are more dangerous than the compleat, and also of more easy cure; for in the compleat, the disarrangement of the part is more considerable; but the hole of the ring being larger, they are less subject to strangulation.

**CURE.** The Ruptures of the groin are susceptible of three different methods of cure; of which I shall speak hereafter, *viz.* the palliative, the radical, and of that which consists in removing their symptoms.

## C H A P. VII.

### *Of the crural Rupture.*

**EXPLANATION** **I**N the bending of the thigh, just in  
**OF THE PART.** **I**n the middle, under the skin and  
 the fat, there is an opening to one side of the ring;  
 this

this opening, which is called the crural arch, has in effect nearly the figure of a small arch. It serves to give passage out of the belly to the vessels which carry the blood for the nourishment of the thigh, the leg, and the foot, and to those which reconvey it from these parts. These vessels are called crural, and the Rupture made by this hole is also called crural

This Species of Rupture happens more commonly to women who have had children than to others.

DIFFERENCES. The crural Ruptures differ only in bulk or size: the biggest exceed not a hen's egg, but ordinarily they are much less.

CAUSES. The increase of the volume or bulk of the womb, in proportion as the woman advances in her pregnancy, is the particular cause of that species of Rupture, the guts being then obliged to bear in greater quantity on the sides of the belly: and as in this case, the muscles are stretched much, and their openings, called arcades, are more patent, the guts or the caul escape more easily at these openings, in the great strainings of women with child in the act of coughing, at stool, or in labour.

SYMPTOMS. They are very subject to adhesions on account of the continual rubbings or collisions they undergo in the motion of the thigh. The bandages being ill-made, contribute thereto much: They are also subject to strangulation.

DIAGNOSTIC SIGNS. The diagnostic signs of this species of Rupture are the same with those of the incompleat Rupture of the groin: The situation bespeaks its species, with respect to the place it occupies,

PROGNOSTIC SIGNS. The crural Rupture is very dangerous, from the difficulty there is of reducing it into the belly; in case of a strangulation, the operation is much more dangerous. The radical cure of it is very difficult to compass; nay it is not an easy matter to keep it in with bandages; unless they are  
made

made with much care and judgment ; so that I may affirm in general, that this species of Rupture is very dangerous.

---

## C H A P. VIII.

### *Of the ventral Rupture.*

WHAT THE BELLY IS. **T**HE belly consists of soft parts, which are the skin, the fat, and the muscles. By muscles we understand those parts of animals, which are known by the name of flesh, which consists of red fibres or strings, which easily separate, when the meat or flesh is boiled. These strings are joined to each other by other smaller strings of another species, and which are so fine and delicate, that the sight scarce discerns them. It is easy to conceive that these fleshy strings may divide and separate from each other, by the strainings we may happen to exert, and that the opening, which this division forms, may give passage out of the belly to the guts and caul with as much ease as the natural holes, of which we have already spoken. These sorts of Ruptures, which may be thus formed, in all the extent of the belly, are called ventral Ruptures.

**DIFFERENCES.** The different places of the belly, where these Ruptures happen, characterize their difference ; for some of them may happen about the navel ; others below ; others again on the sides of the belly. In fine, they may happen in all the parts of its surface, and they ever are Ruptures of the belly, otherwise called ventral Ruptures. All of them may be produced by the gut or caul, or by both together.

CAUSES

CAUSES. The great extensions the muscles are exposed to in pregnancy, and in the dropfy, are the proximate and most common causes of these species of Ruptures: yet violent strainings may give occasion to them.

SYMPTOMS. Of all the species of Ruptures there is none that fatigues and spends the patients more; because in these cases there is an extreme relaxation in all the parts of the belly. The continual twitchings the patients are exposed to, incapacitate them almost to walk, they are ever complaining of weaknesses and sinkings, especially after meals, which allow them no other posture but that of sitting or lying down. These Ruptures also are subject to strangulation and adhesions.

DIAGNOSTIC SIGNS. The ventral Ruptures are known by their softness, their elasticity, and the facility with which they come out of the belly, and are again returned, especially at their beginning.

PROGNOSTIC SIGNS. These species of Ruptures are incurable. They are not so subject to strangulation as the other Ruptures, but should it happen upon them, it is highly difficult to remedy; these sorts of Ruptures are then very dangerous.

CURE. The palliative cure is the only one that suits here, such is the application of trusses; but no bandages are of more difficult execution than those for such Ruptures: And I may without presumption affirm, that no one, besides myself, has hitherto found out the commodious, and sure means of keeping in these ruptures so as to prevent their coming out in what situation or position soever the patients are put.

## C H A P. IX.

*Of the means of remedying the strangulation.*

WHAT STRANGULATION IS. **T**HE strangulation, as was said in chap. iv. is so considerable a straitning of the gut, formed by the constriction of the parts thro' which it comes out of the belly, that its return is not possible. In this case we see, that it must be exposed to all the symptoms, of which I have given a detail in the same chapter, and of what importance it is to remedy it speedily,

**THREE MEANS TO BE USED.** The strangulation is remedied by three means. The first consists in the situation, in which the patient should remain. The second, in the use of proper remedies. The third, in replacing the gut,

**FIRST MEANS.** In the strangulation of any species of Rupture whatever, we must procure to the parts, which are too much extended, a suitable relaxation, to lessen the straitning of the gut. The patient then should be laid upon his back, the buttocks and breast be raised by means of pillows; by this situation the exterior parts of the belly are less extended, and the ruptured guts are made to have a greater tendency to return.

**SECOND MEANS.** The patient being in this situation, the suitable remedies must be forthwith used, and those proper to promote the reduction of the parts. Each country, each practitioner, has his peculiar remedies; but as some of them are approved by all the people of the profession, and every-where to be met with; 'tis on such I shall insist, to the end that the instructed patients may use them directly,  
and

and till they can have recourse to the aid of their surgeon, The coldest and the hardest water, as that of a pump, thrown immediately upon the Rupture, is the most efficacious remedy, and which ought to be used the first, if one is so happy as to apply it in the first moments of the disease; if the patient be laid on a bed, and we apprehensive of wetting it, it will be sufficient to dip rags in this water, and applying them on the affected part, shift them every minute; to this water may be added half the quantity of vinegar. It is to be observed, that this remedy, which is the most sovereign of all those we are going to prescribe, would prove highly dangerous, if not used, at least, at the very first; because after that, it disposes the guts to a gangrene; but being properly applied, it promotes the return of the gut with as much ease as the most dextrous hand, and the most accustomed to this operation.

If these remedies have not been applied, for want of being able to seize on the critical moment, the patient must be bled directly, and that till he faints away, and the surgeon to improve the moment of the swooning, (during which all the parts are in a state of relaxation) to procure the return of the Rupture.

But it may happen that this means has not succeeded, either thro' the disposition of the patient, or the little experience of the surgeon; in that case we must apply on the Rupture the remedies capable of relaxing the strangling parts. Nothing is more fitted to produce this effect than the crum of bread boiled in water or milk; we may add to it oil. This poultice is wrapped up in a small bag of fine cloth: But we here still more usefully employ warm milk put into a hog's bladder, and applied on the ailing part, or an omelet made with oil; that of nuts is the best. These applications should be shifted every three hours, and during the use of them, the patient to be let the same quantity

quantity of blood every two hours also, taking at each time 5 or 6 ounces.

Whilst we thus labour to procure the relaxation of the parts which strangle the gut, we must endeavour to void the matters which may be evacuated from the guts, by means of small glisters of river water, in which has been boiled wheat-bran, and into which is put a large-spoonful of sugar or common salt: by thus voiding the guts, we also procure a relaxation to the exterior parts, by bathing and moistening them.

If these remedies prove ineffectual for two days, people ought not to hesitate a moment to procure the aid of some able surgeon, who is to act in consequence of the violence of the symptoms; (for then they heighten more and more) whilst nurse waits for his assistance she must apply a poultice made of crum of bread boiled in red wine.

In all cases, wherein crum of bread is used, it must be crumbled very fine and smooth.

REGIMEN. During the course of the disease, the patients must have no nourishment, because they throw up all they take, and what is given them is quite lost upon them; besides, the feeding them excites the vomiting, which comes on but too often.

THIRD MEANS. The replacing the parts, which is called reduction, is an operation of the hand, which consists in procuring the return, into the belly, of the gut or caul, which were come out.

It is very difficult to give rules on the manner of performing this operation; besides, it only concerns the people of the art to be instructed therein, and so I forbear speaking of it: Such as are curious of knowing the general rules, which may be given on it, may consult my book, Chap. XIII. Sect II. Part I. It is enough for the patients to know that they ought not to quit their bed, after the reduction of the parts, before they are guarded with a machine called a truss,



to stop up the hole, thro' which the guts or caul were come out, and prevent this accident from happening again. As life depends on such sort of machines, and that the patients are incapable of judging of their defects, I am in the following chapter to give the exactest rules possible to judge of their good or ill constructions, and thereby enable the patients themselves to determine about the advantages which may result from trusses well or ill made.

---

## C H A P. X.

### *Of the Trusses proper for the different species of Ruptures.*

WHAT A **T**RUSSES are solid bands made in TRUSS IS. **T** form of a circle, applied round the body, to oppose the issuing forth of the Ruptures.

THE MATTER OF TRUSSES. The matter of which trusses are made, is a composition of iron and steel forged together so as to acquire a solid consistence, elastic and incapable of warping: This last matter should only make a third, a half, or two thirds of the truss; the rest to be of leather, the whole lined with cloth proper to guard against the hardness of the iron-work.

THE PARTS OF THE TRUSS. It is necessary to know the parts of the truss before we learn to make the proper application of it, or determine its position: Three principal parts are to be observed in the iron-work of the truss; the plate, the circle, and the tail. The plate is the anterior extremity, destined to fasten a cushion, which ought to stop up the hole of the belly; on the outside of this plate is a hook for fastening the girdle of leather: The circle is the part extending from the plate as far as to the tail; the tail is the posterior

terior extremity of the iron-work, to which is fastened the girdle of leather. The plate or the cushion is also called the point of compression; the tail, the point of support.

THE CONDITIONS OF THE TRUSS. The iron-work should be adjusted in such a manner as to apply or fit exactly quite round the body, as otherwise it would be apt to bear false, or warp, gall the patient, and never close up the hole exactly, the Rupture be apt to fall out, the plate of the truss be galling, and give occasion to the adhesion, an untoward symptom, of which we have spoke in chap. iv.

TRUSS OF STEEL. The truss of steel is the only one which may be applied round the body, without being subject to any variation or warping, its turn or rounding being well moulded to the shape of the body for which it is made, renders it firm, invariable and incapable of shifting place, in what situation soever the patients put themselves.

SPRING-TRUSS. Some workmen have imagined they gave a great degree of perfection to the truss by adding to the cushion a spring to make it bear downwards, without considering that if the compression be greater in the lower part, it is less in the upper, where the Rupture takes a new course, and now and then comes out.

JOINT-TRUSSES. Others have devised a joint-truss, the use of which is pernicious; for the truss, which should remain firm upon the body in the different motions of the patients, cannot possibly do so, its joints suffering it to open and close according to the motions of the patients.

ELASTIC TRUSSES. Many more advantages were imagined to be found in certain trusses, to which they have given the name of *Elastic trusses of a new invention*; this elastic virtue which constitutes their merit is very advantageous when this sort of truss is executed by an intelligent hand, who knows how to give

the degree of turn or rounding proportioned to the shape of the body, on which it is to be applied, a thing extremely difficult; for otherwise it ever bears false, galls the patients, and neither restrains the Rupture.

**TRUSS WITHOUT STEEL.** The truss without steel has all the most dangerous inconveniencies possible; and I cannot too much caution patients against a machine, which may easily mislead, from the notion of restraint and pain at first excited in the mind by the idea of steel, which enters into the composition of other trusses; but if they consider that the cushion of the truss without steel has no fixed point to render it immoveable, they shall come easily to understand that it cannot effect an exact compression on the hole of the Rupture; but when the patient is in bed, and that in that case most patients being able to do without a truss, this sort becomes useles, and proves dangerous in all other situations, as it prevents not the exit of the Rupture.

Therefore I conclude, from what I have just said on the subject of trusses, that those agreeing the best are the steel-trusses methodically made, that is, made according to the nature and species of the malady, and turned or rounded to the shape and structure of the bodies of the persons on which they are to be applied. But as it sufficeth not that patients have trusses properly constructed for them, but further necessary, they know how to use them to advantage, I shall in the following chapter relate the inconveniencies which may happen upon the use of these machines.

## C H A P. X.

*Of the inconveniencies which may happen during the use of Trusses.*

THREE GENERAL **M**AY make patients, but INCONVENIENCIES little attentive to their ailments, lose all the benefit they should otherwise derive from the use of trusses executed according to the rules of art. Some arise on the part of the disease itself; others, of the patients; others again, of the trusses.

INCONVENIENCIES CHARGEABLE TO THE SCORE OF THE DISEASE. Ruptures of the caul are very difficult to keep in the belly, because that part being a fatty membrane, is very slippery. How little soever we neglect the retaining them in the belly, they are ever encreasing; patients should in that case then submit to wear their trusses night and day, and tighter than in a Rupture of the gut.

Sometimes the Rupture is found to consist of the gut and caul together, and it may happen that in this case the gut enters into, and the caul remains out of the belly without being able to return on account of some adhesions which restrain it; the patients ought not therefore to go without the truss, as, except in some particular cases, it is necessary to prevent the coming forth of the gut. Art then directs to make a truss that shall close the hole so as to hinder the gut from coming out, yet not over-compress the caul, for fear of causing some alteration therein.

INCONVENIENCIES TO BE LAID TO THE ACCOUNT OF THE PATIENTS. The two extremes of being too thin or too fat are inconveniencies on the part of the patients, which oppose the stability of the truss, and

and make the use of it always difficult, unless the surgeon and the patient, each on their part, give all the attention necessary.

In an extreme leanness, the bones being bare and uncovered, but by the skin, and these bones themselves forming eminencies and pits, the surgeon the most versed in making of trusses, must miscarry, if he employ not all the attention necessary to give them the shape proportioned to that of the bones; but the patients, on their part, ought to apply all their care to keep them in place, as we shall see in chap. XIII.

In an extreme of corpulency, the too great quantity of fat gives the hips a difformity so contrary to the natural state, that the turn of the truss should also be very different from what is assigned it in a moderate corpulency. And it is very difficult for the truss to be capable of producing the effect expected from it, if the patient himself favour not the intentions, and be not careful to tighten it from time to time.

THE INCONVENIENCIES TO BE MET WITH on the part of the patients, in Ruptures of the navel, equally arise from the difformity of the belly, which is more or less prominent, more or less thin, tight or soft, according to the greater or less degree of relaxation undergone by the skin, the fat and the muscles in the state of pregnancy, and of consequence the trusses for these sorts of Ruptures should be as differently constructed as the shapes of bellies differ; for if the belly terminate in a point towards the navel, the point of compression easily varies; if the navel be found lower than the hips, the point of support or bearing is very difficult to find; if the belly be more raised above the navel than below it, the truss tends to fall down below the Rupture: All these differences call for different degrees of attention in the make of the trusses, none of which, in this case, are capable of

remaining in place, unless that sort of my invention, of which I shall speak at the close of this chapter.

The more the truss is apt to vary or shift, the greater degree of constancy the patient should put on, to give it the time to fix or settle, and the surgeon, on his part; endeavour to mould and fit it to the body of the patient by degrees. In persons extremely thin, we must not at first tighten it to the highest pitch, the use of it would then prove discouraging and insupportable. The parts, that serve for seat to it must insensibly be made accustomed to its impressions. In persons extremely fat, the same precautions must be used, because the fat can subside but by little and little under the truss; and so it must be tightened but in proportion as it sinks in the thickness of the fat, without which it would become too wide; these degrees of attention should then be divided between the patient and the surgeon, till the truss has acquired a firm and invariable situation. The patients ought not to put off their truss night and day, till they are become accustomed to it. When the Ruptures have a great facility of coming out, as those consisting of the caul have, every motion must be avoided capable of determining the parts to come out, as violent striding, raising the arms too high, and strong sneezing: Finally, if the belly be bound, the patient is obliged to strain much at stool, and then it is proper to procure an open belly by means of glysters, or making him swallow a little purging electuary; if notwithstanding this, he be obliged to strain in the least at stool, let him rest his hand on the upper part of the plate of his truss, to prevent its ascending; and this he is to do every time he sneezes or coughs or blows his nose; because in these great motions the cushion of the truss is always determined or apt to ascend, and then the hole it should stop is found a little uncovered: By all these attentions the parts will be gradually accustomed to remain in the belly and acquire

quire the habitude of not coming out, and the patients being in bed, in that case, they may pull off their truss at night.

INCONVENIENCIES ON THE PART OF THE TRUSS. We have just said that trusses can only gradually mould themselves to the bodies of the patients; they are therefore of themselves subject to some variation, which must necessarily be remedied, to procure them the utmost degree of perfection; this perfection consists, as I have already said, in the just turn or rounding, and exactly proportioned to the parts on which the truss is to be applied; for if it bears false, I mean, if it bears on one part more than on another of the circumference of the belly, it cannot fail to gall, and the point of compression be vicious and irregular; besides, this defect makes it subject to break in the part where is the void or hollow; this defect is not always perceivable at the very first time it is applied on, because the covering, which is new and striking conceals its hollows, but after being wore for some days, the covering flattens; the fat, which is under the girdle, subsides; the leather, which forms the rest of the circle, lengthens, and the truss no longer compresses in any part of the circumference of the hips, unless in the part which bears false. This inconvenience, which is considerable, is easily amended, when patients come to be well acquainted with the manner of ordering these machines: But a defect common to all the trusses made for the Ruptures of the groin, and those of the bendings of the thighs, and for which no one before myself was ever able to find a remedy, is that they bear less on the opening, which they ought to stop, when one happens to set very low, because then the belly sinks; this defect stands corrected in the trusses of my manner, to so considerable a degree of perfection, that the patients are always surprized at not finding that inconvenience, after having used the common trusses. And

therefore it was found necessary to order the patients to set always high; but that is not possible to be done every where, unless one was always to have his seat carried about with him, a thing highly inconvenient in a thousand instances; this defect is likewise to be met with on many other occasions, as in persons very thin, when in bed; the cushion of the common truss never bears on the hole in fat persons, in those of a reasonable good plight of body, in like manner as in the thin; the same thing is also to be found, when they sneeze, blow their nose, cough, or are at stool, and all the means proposed to remedy this inconveniency, are as embarrassing as useless, and in no manner come up to the simplicity of my truss, in which there is found none of these inconveniencies. Here is the proper place to mention a discovery, which my application to be of service to persons of the sex, put me upon, in reflecting on the lot of many women, whose delicacy of constitution incapacitates them to go their full time with child.

The most common cause of miscarriages is the same with that of Ruptures, it arises from the relaxation of all parts of the belly, both internal and external, and takes rise in the too great quantity of serosities, which water the ligaments, which ought to keep in place each of the parts contained in the belly. Now the ligaments of the womb are so often relaxed by the serosities abounding in the blood, that that part remaining unsupported, on account of the weakness of its ligaments, it is impossible the child should come to its full time, because it determines by its weight the womb to remain in the lowest parts of the belly; and not finding there sufficient room to grow, dies thro' the constraint it undergoes.



The means I have found to remedy these troublesome disorders are as simple as the following reasoning, which I use to prove its efficacy. The ligaments of the womb, and the muscles of the lower belly being too much relaxed, the growth of the child is prevented, because the womb tends too much towards the lowest part of the belly, where it is straitened for room, the muscles of the belly not being strong enough to support it forwards: If by the means of a truss sufficient to balance the relaxation of these parts, that defect may be supplied, it is not to be doubted but that women subject to miscarriages will happily go their full time: The experience of upwards a hundred women, to whom I have given this relief, proves it; having often miscarried, before the use of my truss.

It is made of a flexible matter without any iron-work at all, but strong enough to resist the weight of the belly. It stretches in proportion to the growth of the child; nothing is more easy to apply and to wear; it puts pregnant women, the most subject to miscarriages, in a condition to walk and go by any carriages; and it becomes so commodious to them, by giving a degree of firmness to the whole body, that many women use it out of the time of their pregnancy. But it proves, besides, highly useful to women, whose belly, being very heavy and pendulous, hinders them to walk, and to persons to whom it is not possible to apply the common trusses of the navel.

## C H A P. XII.

*A method for taking the measures of Trusses, necessary for persons afflicted with Ruptures.*

MEASURES **P**ERSONS, who would incline to  
TAKEN. procure trusses for themselves, not  
always living near great towns, where they are com-  
monly made, have need of instructions to enable  
them to send their exact measure; I imagine it to be  
useful for such, to put them on the easy method of  
taking exactly the dimensions of their own bodies,  
and to insist more particularly on some circumstances  
they ought to observe in relation to the different spe-  
cies of Ruptures.

FIRST, The patient should give a particular detail,  
in an instructive memorial of his constitution and age;  
whether he or she are married or not; the date of the  
Rupture; and whether the place he lives in be moist  
and marshy, or dry.

SECONDLY, He should, as much as may be, re-  
collect the cause, which has determined or occasioned  
the Rupture, whether a blow, a fall, a fit of coughing,  
a sudden effort or straining, or child-bearing.

THIRDLY, He must determine nearly the size of the  
Rupture, and on what side it lies.

FOURTHLY, He must set down precisely its place,  
if in the groin or bending of the thigh.

FIFTHLY, Whether or no it re-enters, and whether,  
in re-entring, it returns more difficultly in a standing  
than lying posture.

SIXTHLY, When the Rupture is in the bending of  
the groin, it is necessary to distinguish whether it de-  
scends as low as the side of the natural parts.

SEVENTH-

SEVENTHLY, If it is in the bending of the thigh, it is necessary to specify, whether it be round or long.

EIGHTHLY, If there are two Ruptures, it is necessary to hint which is the biggest.

NINTHLY, It must be remarked, whether the person be fat or thin, or only in a tolerable good plight of body.

TENTHLY, It must be hinted, whether the patient has one hip bigger than the other, which is a very common case; or if there be any other deformity, it is necessary not to fail describing it, and setting down its place with ink upon the measure.

To this memorial the patient may add the measure of his body, taken with a slip of paper of a proper length. Whether the Rupture be single or double, in the groin, or bending of the thigh, it is sufficient to lay the middle of the slip of paper immediately over the part where the cleft of the breech ends, and to join the two ends of the paper above the place where the top of the natural parts re-unite.

If the Rupture be in the navel, in the same manner will be taken the size of the belly, by laying the middle of the slip of paper on the part of the back which answers to those of the sides, which are between the ribs, and bones of the hips, and by joining the two ends of the paper over-against the part where the middle of the paper has been laid behind the back; if the Rupture be precisely at the meeting of the two ends of the slip of paper, that must needs be specified in the memorial; if not, it is necessary to mark exactly at what distance from this meeting of the two ends of the slip the Rupture lies, whether a quarter of an inch, half an inch, or one or two inches above or below.

Care also may be taken to specify in the memorial, *1<sup>mo</sup>*. The part of the navel the Rupture occupies, either the middle or its circumference, either lies above or below it, or to one side. *2<sup>do</sup>*, If it is of an old or recent standing. *3<sup>tio</sup>*, Its size. *4<sup>to</sup>*, Its shape. *5<sup>to</sup>*,

If it re-enters or not. 6<sup>to</sup>, If the navel be higher or lower than the bone of the hips. 7<sup>mo</sup>, If the belly be hard or very soft; 'tis moreover necessary to know, if the patient is a woman, whether she has had children, and how many.

All those particulars are very necessary to be mentioned, in order to execute with care the trusses proper in each of these circumstances, and render them as commodious as useful, when the patients on their part shall use the necessary care in their just application: On this head I am to prescribe some rules in the following chapter.

### C H A P. XIII.

*On the manner of putting on the trusses; necessary precautions to be observed, previous to the laying or adjusting them.*

MANNER OF PUTTING ON TRUSSES. **T**HE truss would become absolutely unserviceable, if improperly adjusted. It is, therefore, of importance to the patients, to have rules to follow for their just application. These rules are the same for persons of what age soever, even for children at the breast.

The use of the truss is to stop the hole, at which the Rupture comes out, in order to prevent its coming out; we must for that purpose begin with reducing it back into the belly.

The Ruptures, unaccompanied with symptoms, re-enter with facility enough of themselves, when the patients are in bed; of consequence, the morning, at the hour of waking, is the time to apply the truss.

To do it with ease, of what nature soever, or in what part soever the Rupture be, the patient passes the girdle below the back, and approaches with one hand the cushion of the truss over-against the part of the Rupture; with the other he examines whether any thing remains out of the belly; afterwards, laying hold with this last hand on the girdle of the truss, he pulls it to himself towards the cushion, whilst with the other he fixes the cushion directly upon the part where the Rupture appeared before reduction: He at the same time fastens the girdle to the hook, which is on the outside of the cushion.

To procure the proper position to the truss, the lower border of the girdle should be behind the back, immediately above the cleft of the breech. When the patient is sure it has gained its due position, he must then tighten it sufficiently: For this purpose he lays hold on the girdle with one hand, at the part where it joins to the iron-work of the truss, and pulls it successively by slipping the hand as far as to its extremity; while with the other hand he holds the cushion steady on the part where it should be placed; if it were not supported, it would shift to one side of the thigh, and no longer be found on the hole of the Rupture. It is not necessary that the truss be too slack, and neither must it be too tight. You will observe to tighten it from time to time; fat people should particularly mind this, because the longer they use the truss, the fat sinks under the girdle, which of consequence becomes too slack; which is the reason that the over slackening of the girdle is charged on its lengthening: And it also happens that the girdle of the truss is found hid by the pads which the fat forms both above and below, when the fat has been entirely flattened under the girdle by its reiterated compressions.

Almost all the patients have the custom of placing the cushion of their truss too low, especially such  
whose

whose Ruptures fall down pretty low, without considering, that the business is only to stop the hole, to prevent the parts from coming out ; for when the cushion is placed so low, the hole remaining unstopped, the Rupture comes out above the cushion of the trufs.

When the patients are thin, the trufs fails not to ascend, especially when they are in bed : In this case, they must use a small strap, which is fixed to the trufs ; they pass it under the thigh, and fasten it to the iron-hook, which serves to fix the girdle ; but they must observe that it ought to be put under the leather of the girdle, as otherwise it would be always apt to loosen.

When there is a necessity of wearing the trufs of nights, patients must take care to adjust or put it in order before they get out of bed of a morning, and as the motions they give themselves lower or raise it behind, they must not fail replacing it in its due position, as otherwise the cushion would not bear exactly upon the hole.

With respect to children who are not cleanly, we must be careful of shifting their trusses every day, to prevent the ordure from heating or fretting them.

In plump fat children, the girdle should behind be a good finger's breadth above the cleft of the breech ; in the thin, it should immediately touch the cleft, or even be a little lower.

We must be ever cautious in shifting their trufs, that the Rupture does not fall out again ; for this purpose, we must have ready at hand that which is to replace the orher, and lay the finger on the hole, till the second finger is adjusted.

## C H A P. XIV.

*Of the radical cure of Ruptures.*

RADICAL **B**Y radical cure we mean such as re-  
CURE. **B** moves a disease to its very root. The radical cure of Ruptures is, therefore, that, by means of which we may cure these disorders, without apprehension of any return. Is this possible? 'Tis what may be easily proved.

But as I should be obliged to transcribe word for word what I have at large to so good purpose writ on this subject, such as would satisfy themselves of this truth may consult my book, chap. xiv. sect. ii. part i.

All I can say to prevail on the patients not to suffer themselves to be discouraged, as commonly those are, who are afflicted with these disorders, is, that there are none for which there is a greater variety of remedies known. The only question is to know how to appropriate them to the constitutions of the patients, their age, their sex, the climates they inhabit, and to know how to distinguish the species of Ruptures which are curable from those which are incurable. 'Tis with these infirmities as with all the others; such a one cannot be cured by a remedy, which ten or a score others have found the good effects of, because the circumstances differ. This is the reason, why the remedies of the good women do sometimes much good, and very often a great deal of harm.

F I N I S.

Advertisement in the ...

# CH 11

## Of the ...

The first part of the ...  
 is ...  
 The second part ...  
 is ...  
 The third part ...  
 is ...  
 The fourth part ...  
 is ...  
 The fifth part ...  
 is ...  
 The sixth part ...  
 is ...  
 The seventh part ...  
 is ...  
 The eighth part ...  
 is ...  
 The ninth part ...  
 is ...  
 The tenth part ...  
 is ...

CH 11









