The Mechanics of Labor

Taught by Andrew Taylor Still, M.D.
Kirksville Missouri

By

W.J. Conner D.O.
Kansas City, MO

[RZ386.58]
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THIS BOOK

Is

RESPECTFULLY DEDICATED

To the Grand Architect and Builder of the Universe; to Osteopaths and all other persons who believe that the first great Master Mechanic left nothing unfinished in the machinery of his masterpiece—MAN—that is necessary to his comfort and longevity.

—A. T. STILL.
Introductory

In writing this brief epistle, it is not the intention of the author to write a text book on obstetrics. I claim no originality for myself, just my interpretation of what Doctor Still taught. Like Christ, he taught much, but wrote little, especially on obstetrics. Having been intimately associated with him for five years, during the most active part of his life, and being in the Obstetrical Department of his Institution, I feel competent to interpret his teachings.

When he obtained a Charter for the American School of Osteopathy, he specified that the objects of the school were to teach an improved system of Surgery, Obstetrics and General Practice.

He never claimed Osteopathy to be a new science of healing, no more than did Henry Ford claim he was building a new car when he put on a self-starter. He gave all honor and praise to the many great men who had spent their lives in their effort to improve the health and well-being of their fellow men.

In this epistle I shall discuss the improvements as related to the practice of obstetrics. They consist of two fundamental principles: First, a new power plant; second, eliminating resistance, which I shall discuss as I understand them. To the extent you use these two fundamental principles will depend your success as an obstetrician.

THE AUTHOR.
Preface

To the prospective mothers of this and future generations, I dedicate this brief epistle.

I pray that those to whom she has a right to look for professional advice and skillful service may lay aside those ancient theories and hoary traditions, whose only claim to usefulness is the fact that they knew Father Time when he was a boy, and study and analyze this epistle with the nineteenth century torch of reason, laying aside those antiquated theories and traditions along with the ox cart, the tallow candle and the pony express and study them as being in a class with the airplane, Roentgen ray and radio. To the end that the mothers may not look forward to the puerpural state as passing through the valley of the shadow of death but as the dawn of a glorious morning, the day of her transformation, the real beginning of her life work. That she may not wish to be asleep from an anaesthetic when the guest arrives but awake and rejoicing at the first sound of its voice. That she may be relieved of the penalties, physical, social and industrial that many now suffer from for complying with the highest law of animal life, the propagation of the species.
Kansas and he was there collecting seed and provisions to replant their crops and feed them until they could make another crop.

My recollection of him is very plain; he loved to entertain children by drawing pictures, being very clever with a pencil.

Soon after he moved to Kirksville and established his home there and began practicing his new system of healing. We knew him as the bone doctor. Most very kind of name was given him but his title as he called himself was the “lightning bone setter.”

Nobody took him seriously. I remember he had an office over a store like other doctors but had little practice. For many years he struggled along barely existing.

After several years of starvation he began to make trips to other towns where he would lecture on his new system of healing and treat those who were ill by his new method.

In this way he accumulated some money and established a reputation for his new method. About this time the people around Kirksville began to take Dr. Still more seriously. They began to have him treat them when nobody else could do them any good.

Among those early patients of Dr. Still was my mother. She had been a semi-invalid for many years, nobody had cured her, so she was ready to give him a chance. He set one of her innominate bones which restored her to normal health.

She has trusted her physical well-being to Osteopathy ever since and is now going strong at 88. This is just one of the many cases he was treating every day. He healed me when all the Medical Doctors said I could only be cured by an operation and ever since I have been singing along with thousands of others:

“I once was a crippled farmer boy, but thanks to Dr. Still
He fixed my back, my legs, my arms,
He put me through the mill.
And though I’m now a doctor, I’m as good as any man,
For I have been made over on the Osteopathic Plan.”
—Mrs. Ivie.

He cured my brother of a lame foot after a Medical Doctor had operated on it seven times. From the above is it any wonder six of my family are Osteopathic Physicians?

After seeing what Dr. Still had done for the family and what he had done for me in particular, I decided to study his system. A few had already entered the field and I was ready to start in the fall of 1894. Dr. Still assured me I would have no trouble learning it as Arthur Hildreth had gotten through all right.

About twenty-five students were in my class. Most of our training was received by being assistants to the staff doctors.

Dr. Still would come in every few days and talk to us. He would tell us of something new he had thought out and how little need we had for drugs.

Day after day he talked to us and much that he said usually went so high over my head that I heard
only the sound. Many of the things he told us I
have been trying ever since to analyze. Many things
I have been able to understand, some I have analyzed
partially and some I am still trying to solve.

Now listen to reminiscence No. 1: Dr. Still never
owned a clinical thermometer, he called them pig­
tails; said we did not need them and none of us car­
ried them in sight.

How many of us are following his advise about
thermometers?

Reminiscence No. 2: Every one of us who ever
heard him speak on obstetrics know his feelings
toward forceps. (He called them tongs.)

While I was connected with the American School
of Osteopathy my work was to take care of the clinical
obstetrical cases. One night I was called to show
the students how to deliver a case.

I labored with the case all night with no success.
In the morning I called Dr. Charlie Still, my supe­
rior: he had no better success than I. He called Dr.
Wm. Smith who put on a pair of forceps and deliv­
ered the baby with the usual results of forceps
deliveries.

As soon as the case was properly cared for I
returned to the school. As I neared the building I
noticed Dr. Still sitting on the steps, as I approached
he beckoned me to come hither, I felt very much
frightened as I knew how he hated forceps, but I
marched up to him and he began to talk to me like
this: “I understand you used the tongs on a baby
this morning.” I had to say yes, but tried to clear
myself by passing the responsibility to Charlie and
Smith. I told him there was nothing else to do as
it was a case of inertia. Then he exploded; said

the inertia was all in my head and if I allowed the
tongs to be used any more they would not need me
any longer around there.”

I asked him what should I have done and he said,
pretty loud, too, “Call me, I can deliver them with­
out tongs.” I asked him how should I have proceed­
ed then he said, “turn in the ovarian artery.”

That little dialogue made quite an impression on
me. It took me some time to study out what he
meant by that statement, “turn in the ovarian
artery.” I have discovered to my satisfaction what
he meant by turning in the ovarian artery and it has
changed the whole principle of the mechanics of
labor.

To Dr. Still that was as simple as it would be for
a mechanic to tell the driver of a car that would not
go, “Put some gas in the tank.”

Yet I was years trying to understand what he
meant.

When we learn the meaning of the above phrase,
the mechanics of labor as Dr. Still knew it, will be
clear to us and the teacher who speaks of the uterine
contraction will be in a class with the scientist who
teaches that the earth is flat.

Now, fellow obstetricians, let us quit studying
those old allopathic books on the use of forceps and
devote our mental energy to discover how Dr. Still
managed to care for a general practice for a lifetime
and never owned a pair. He told us he never attend­
ed a case that he did not “deliver” successfully.
When we do that we will have a distinct Osteopathic
technique and we may not need to carry those
forceps.
Reminiscence No. 3: Dr. Still taught us that the Creator in making woman made her perfectly able to reproduce her kind without injury to herself, referring to lacerations. He taught us that lacerations should never happen.

I sat before him while he demonstrated, with a foetal skull in his hands, his method of reducing the size of the foetal head so that it would pass, no matter how small the outlet.

He put an imaginary patient in bed and showed me the method but for all that I went on letting mothers lacerate themselves in that good old allopathic way until I understood what he was trying to explain to me.

He also taught us that Osteopathy would reduce the pain incident to labor. I groped around in the dark all those years trying to find that magic spot and not until I discovered how to let the baby out without laceration was the mystery solved. He often said that the mothers of the land would be better off if there were no doctor present, than to have the kind the allopathic school furnishes.

My mother relates an incident which happened when she was present. A young physician had labored long and diligently to deliver a woman but without success. He called Dr. Still to help him out. When Dr. Still arrived he began telling him what a large baby and small mother they had to deal with. While Dr. Still was removing his coat and preparing for action he remarked, "Do you think an architect would build a ship and after it was completed be unable to launch it, if not, then why should the Divine Architect, the master builder of the universe create a baby and then be unable to deliver it."

I don't know if he told that young Medical Doctor that the inertia was in his head but my mother states that soon after Dr. Still got in action the inertia disappeared and the baby began to cry.

In all his lectures to us he always emphasized his implicit faith in the recuperative power of nature, of his great respect for the Divine Architect and builder of the human body which he likened to a perfect machine, built by the Divine Architect of the world and constructed to last three score years and ten if kept in proper adjustment.

Adjustment was his great talking point. He was always talking about dislocations, a dislocated hip, a dislocated rib, vertebrae and so on. Frequently he would speak of a dislocation of the articulation in the sternum. I examined the sternum and found in the adult sternum no articulation and I read in the allopathic books that the articulation between the manubrium and gladiolus became ossified in the adult. I could not understand how there could be a dislocation there. However, since I saw the demonstration by Dr. Miller of Pennsylvania last year at the convention on a case of dropsy, it brought back to my memory those many lectures on dislocation between the bones of the sternum and I have found that there is a world of possibilities in that treatment.

Now, fellow Osteopaths, I have tried to make this just a little more than a mere reminiscence of Dr. Still; tried if possible to encourage a little greater faith in the teachings of Dr. Still and a stronger effort to understand what he meant when he said D. O. means Dig On.
Fellow Osteopaths:

It is a pleasure for me to stand before you this morning and give you the results of thirty years of constant thought along one particular line, the mechanics of labor.

It is said Rome was not built in a day. I don’t know why the reference is made to Rome for there are many other things that were not built in a day. Many principles have required years and ages to be unfolded. Galileo taught the earth is round, and revolved on an axis; Columbus put that principle to test and proved the correctness of it, and still centuries elapsed before it became universally accepted.

Dr. Still gave to the world a principle and explained it to us as best he could.

Those explanations were hard for us to understand. There is an old saying: “There are none so blind as those that don’t want to see.” His teaching was so different from what we had been taught for ages; we could not understand, and it has ever been thus. Every new principle has had a struggle for existence. Often the greatest opposition comes from those bigots who thought they knew everything and were unwilling to be taught. Others were unwilling to make the effort to prove the correctness of the new thought. Others of small mental calibre said, it was wrong because some old bigot they knew of, said it was not correct.

Dr. A. T. Still’s motto through his entire life was: Accept only that which can be proven. Because some plug hat gentleman from New York said such and such was so, never convinced Dr. Still that it was right. Now, fellow Osteopaths, that is a very good motto for you to adopt. Learn the basic principles of Osteopathy as laid down by Dr. Still, found on page 14, Art. 14 to 22 of his principles and practice. Stick to them as closely as the Christian or Jew sticks to the ten commandments; anything they don’t cover, reject, and you will always be on safe Osteopathic ground.

Dr. Still never talked idle chatter. Every time he spoke he said something; much of it sounded like hokus pocus, but it was because we could not understand.

When he said to me: “Turn in the ovarian artery,” when I asked him what should I have done in a case of inertia that I could not deliver without forceps, I knew he meant something, but just what it was it took me years to understand, maybe I don’t understand yet, but in this effort I will endeavor to interpret it as I have learned to understand it.

In order to understand it, I have had to change the mechanics of labor from the principles of uterine contraction to that of hydraulic pressure. Take the strength from the uterus and give it to the broad ligaments.

If the broad ligaments were detached from the bony pelvis there could be no delivery of the fetus.
The uterus is principally made up of sinuses. Much the same as many small tubes in an auto tire. When the ovarian and uterine arteries pour their blood into those vessels, the pressure is like that of the hydraulic press. The strong fibrous and muscular broad ligaments acting as the drum of the press. As the fetus advances the muscles of the broad ligaments keep tightening down on the fundus of the uterus holding the gain while the fetus gets its circulation “between pains.”

There is a nerve somewhere analogous with the nervi-erigentes, which prevents the escape of the blood from the uterus during this inter uterine pressure. (I have to use another term as uterine contraction is out of date and is a misnomer).

That center which controls this nervi-erigentes is the keystone of osteopathic mechanics of labor. Just where it is located, I have never had an opportunity to find out; that is the business of our research institute, but every Osteopathic Obstetrician knows he gets results from manipulation of the lumbar area of the spine greater than he can explain from the knowledge of anatomy now available.

Now listen, perhaps Dr. Still explained this to me as clearly as I have given it to you. Remember the motto above mentioned and as you advance in your work here, observe your teaching as you go along. Examine the uterus as you have opportunity. Observe the great force necessary to expel the fetus and when the uterus is empty and you feel a small hard round ball in the hollow of the pelvis you will wonder how that little ball of muscle could exert so much strength and again in twelve hours you find it four times as large, extending as high in the abdomen as the umbilicus. If you are of an observing mind you will wonder why such a rapid growth.

The facts in the case are that the broad ligament has relaxed and the vessels have again filled with blood.

Perhaps we can better control post partum hemorrhages when we become more acquainted with that center which controls the nervi-erigentes to the uterus.

In his charter for the American School of Osteopathy, one of the objects enumerated was to teach a better system of obstetrics. Are we keeping the faith?

I am not going to preach a sermon, but I am going to take a text from the Bible. The Scribes and Pharisees came to Christ to find out how they might enter the Kingdom of God and Christ said: “Unless ye be born again, ye can in no wise enter the Kingdom of God.”

Now, in order for you to become Osteopaths, you must be born again. You must get all those old allopathic ideas out of your system. That will be hard for you to do, but you will never get anywhere until you do.

Dr. Still said, “The American School of Osteopathy was chartered to teach an improved system of Surgery, Obstetrics and general practice. Now, fellow Osteopaths, in what particular way is obstetrics as practiced by Osteopaths, an improvement over the system practiced by our allopathic brethren?”
THE MECHANICS OF LABOR

Now in what respect can we improve on the present system?

1st. Less injury to mother.
2nd. Less injury and fatality to babies.
3rd. Less time of labor.
4th. Less pain during labor.

In those four ways there can be improvement in Obstetrics. All of you who have been in practice any length of time are familiar with stories like this: "Doctor, I was as healthy and strong as any girl need be until I was married, but since my first baby came, I have never seen a well day. They have operated on me twice and say I must be operated on again, so I came to you to see if you could do me any good." Certainly! there is room for improvement under class No. 1.

If a farmer should build a lot and make the gate so small he could not drive his wagon through without tearing down the posts, you would think him a fool. Then what would you think of a Creator of the universe, the Master Mind of the world making a woman and not leaving a gate large enough for the baby to get through. The facts in the case are: He made that opening large enough for the baby to get through if we only knew how to direct it the proper way.

Dr. A. T. Still taught us that the opening of the birth canal was amply large to pass the foetus if the driver knew how to direct it the proper way.

In my thirty years of practice I have never been able to use all the bigness of the birth outlet. When

INTERPRETED BY DR. W. J. CONNER

I allowed a laceration, it was because I could not use the opening provided. I think we will all agree that lacerations are the greatest injury the Mothers receive and if we can prevent those, we will have improved the present method as regards No. 1 and when No. 1 is taken care of the others will be cared for also.

I will proceed now with a demonstration and try to make clear to you the system Dr. Still taught, but of which I received little conception of what he said. I was trying to understand and prove what he was saying from a knowledge I had received from the old allopathic books. I had not been born again. My eyes are open now, however, and I can see the concept as Dr. Still saw it.

The principle involved here is that a body will pass more easily through a straight tube than a crooked one and that a wagon will pass through a gate at right angles with less danger of tearing down the fence than if it were driven through at another angle.

You will pardon me for being tedious, but I want you to get the thought I am trying to convey. I hope it won't take you as long to grasp it as it did me, when Dr. Still explained it. I have explained this to others and they never came within a mile of getting the thought I wished to convey. They had not been born again and I doubt after this tediousness in explaining the technique half a dozen here will grasp the meaning of what I say, but be of good cheer. Keep turning the thought over and over in your mind and maybe some time it will come to you.
I was reared on a farm and in my work of looking after the stock, I observed all animals assumed a particular position during the act of expelling their young and I am told the aborigine mother takes the same position only in an exaggerated degree.

Now, fellow Osteopaths, if you want that baby to strike the outlet to the birth canal at right angles, get your patient in the position on the bed that the Indian Mother takes standing on her feet. Then you will find there is ample room for the baby to pass and you will find you have a large clearance besides. If the head seems a little large with the mother in that position, you can compass the head until it passes easily. You will not need to hold it back and prolong the agony, just let it slip right out.

In conclusion let me say Dr. Still had the highest respect for the Divine Builder of the Universe and the natural laws of life. He could see that the allopath doctors were making a pathological and artificial instead of a physiological and natural phenomena out of the birth of a child. That is why he said, "It would be better for the Mothers of the land if there were no doctor present than to have the kind the allopathic school furnished.

If there was no doctor present to direct her, she would instinctively take the position of the Indian Mother and avoid the injuries so common among the mothers of today.
study of the matter, but I have kept my eyes open when I had opportunity to see things. I hope you will do the same and maybe some day we will perfect that better way Dr. Still spoke of.

Now listen, I witnessed a caesarian operation once at the general hospital, the case was a colored woman and the operation was done with spinal anesthesia.

When the abdomen was opened out came the uterus, very large. A long slit in the side allowed the baby to escape. In the cut he made I observed the wall of the uterus appeared about one and one-half inches thick. He put a ligature around the neck of the uterus preparatory to amputating it. When he stopped the circulation to the uterus I observed it began to reduce in size. I was astonished at the amount of blood she lost, after he ligated it it kept on bleeding and as the blood escaped from the uterus it became smaller and continued to get smaller until it was only one-third the size it was when he first took the baby out. If that body had been muscle as the heart or biceps could it become smaller like a toy balloon when it is punctured as, I understand, a muscle is just as large when contracted as when at rest the only difference is in shape.

After the baby is born you feel a small hard tumor like mass in the hollow of the pelvis. You wonder how that small ball of muscle had so much force, then again in a day or so it has enlarged until it reaches the umbilicus, why that quick growth? Does any other muscle in the body change in size so quickly. My only explanation is that the sinuses have again filled with blood after danger of hemorrhage has passed.

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2. During the contraction in the second stage of labor the examining finger notes the descent of the foetus an inch or more, yet I have never been able to observe the uterus moving up and down in the abdomen at each contraction which it would have to do if it pushed the foetus down by contracting its body.

3. Next we will discuss the broad ligaments and see what part they have in labor.

I claim the importance is so great that there could be no birth without their aid, regardless of the force used to expel the foetus.

When you first examine the case during the first stage of labor you find the os uteri high in the pelvic cavity; as the second stage begins you find the uterus drawn down to the pelvic outlet where it remains until labor is over. There is nothing else to bring it down and hold it there, but the broad ligaments. If they were not in action and the uterus was just contracting on its long axis it would have absolutely no explosive force and would just slip off the baby and leave it in the pelvic cavity.

Dr. Still said, "when you want more power turn in the artery." Just as the mechanic would say of the hydraulic press turn in more water. In the hydraulic press there is another part to the machine besides the water coming in. There must be some method of keeping it in the press and to let it out when the work is completed. The same thing is true of the uterine action, there must be some means to keep the blood from flowing out through the veins. I think there is just such a system of nerves to the
uterus as the nervi-erigentes, having a similar action.

Again when the heart contracts there is no pain, neither is there pain when the stomach or biceps contract. Then why should there be pain when the uterus contracts, the facts in the case are, it doesn’t contract. The pain produced is from congestion and dilation of the sinuses of the uterus.

Those sinuses have been dormant up to this time and have to be dilated. When they are sufficiently dilated to give sufficient force to expel the foetus the broad ligaments contract. The presenting part is engaged in the bony pelvis and the second stage of labor has begun by palpation you notice the os descend in the birth canal over the outer opening.

If the broad ligaments don’t pull it down I pray you tell me what force does. Try to push the uterus up at this time and you will observe with what force it is held.

Application of Dr. Still’s Principles of Labor

CHAPTER 4.

READ BEFORE THE NATIONAL CONVENTION OF THE AMERICA, OSTEOPATHIC ASSOCIATION AT DENVER COLORADO, JULY 29, 1927

THIS is the fourth chapter of a series of papers I have written on the Mechanics of Labor as Dr. Still taught me; this paper treats exclusively of the second stages of labor. The next paper will be entitled the accidents and emergencies of labor, their prevention and treatment such as:

1. Lacerations, both internal and external, which Dr. Still said should never happen and I say, “They should never occur;” and I believe I can convince you that when they do happen it indicates an incompetent operator, more than it does an imperfect machine.

2. Milk leg which should never occur.

3. Birth marks, which no child should be permitted to carry through life.

4. Post partum hemorrhages.

5. Puerperal fever.

6. Placenta praevia.

7. Inertia.

8. Lactation; Morning sickness; Etc. And I shall try to show you why abnormal presentations occur and how to prevent them.
Fellow Osteopaths, Christ said, “He that is without sin let him cast the first stone.” Well I am not that man for I have committed many of the obstetrical sins which I shall condemn in this paper, but that was before I thoroughly appreciated Dr. Still’s theories or understood his technique. Before I read my paper and give a demonstration I want to have a little heart to heart talk as a kind of explanation as to what it is all about.

Dr. Still’s mission, among other things, was to teach an improved system of obstetrics. That to me meant better teaching than that of the allopathic school.

I observed that the music at my coming out parties was not so loud and rasping as that produced at the parties conducted by the old system. I just felt sorry for those mothers who did not know about the better method.

All the obstetrical training I received was from Dr. Still and his son Charlie. I had read the allopathic books but did not give serious thought to what they stood for. I watched the allopathic doctors in action, (masters of their specialties) and found they were using “gourd fiddles,” while I was using a “Cremona.” I saw at a glance what their trouble was. When the music became so bad that they could not endure it they would chloroform the mother, give her twilight sleep or gas to keep down the noise. I just felt sorry for the whole outfit and wondered why everybody did not get an osteopathic violinist for such parties, never dreaming the osteopaths did not all have a cremona violin.

I have observed, perhaps the most celebrated obstetrician in our profession in action. He only had an old allopathic gourd fiddle. I have listened for an hour or more to another of our great obstetricians tell how to make a new opening with a pair of scissors for the baby to come through, as though the Creator did not know where to make the outlet. Yet another told in rather a boastful way of having used forceps 104 times during his short career.

I thought to myself, “Shades of Hades,” what would Dr. A. T. Still have said if he could have been present. I think he would have been struck dumb, like the hero in Dr. Charlie’s story of the man with the load of potatoes when the bad boy took the hind gate out of his wagon as he drove up a hill.

Surely those doctors do not know that there is anything better than a gourd fiddle.

I have been a member of the Missouri State Board for five years and have had the obstetrical questions many times. Their examination papers indicated they were only equipped with gourd fiddles knowing little except that which is taught in old allopathic books. If this is true what right have they to call themselves Osteopathic Obstetricians. Would a gourd fiddle make any different music if you called it a Cremona?

On such a fundamental question as the action of the broad ligaments during labor, three lines indicated all they knew.

On such a primary question as the cause and treatment of milk leg only pages and pages of manuscript on the pathology of phlebitis were produced.
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After the allopathic treatment of elevating the leg and applying hot fomentations they would add an osteopathic treatment, which to me means absolutely nothing. Not one ever hinted as to what the cause was and without knowing the cause, prevention and treatment are impossible.

I asked, what would you carry in the obstetrical bag? Some would carry a rope to tie to the foot of the bed for the mother to pull on, with her feet against the footboard of the bed.

I visited the office of a friend who showed me a harness he buckled on the mother and fastened to the foot of the bed so she could use her whole body to push against the footboard.

I was being shown through a hospital and in the delivery room I noticed a footboard bolted to the foot of the delivery couch and cables of gauze fastened to each side. I asked my guide what they were for and he informed me that some of the doctors had the board put on so that the mother could put her feet against it and pull by the cables on each side.

When that is done you exaggerate the lumbar curve and make the birth canal more tortuous, thus requiring more force to move the load. By directing the foetus through the os uteri at an obtuse angle you insure a lacerated os. The presentation appears at the posterior commissure of the birth outlet which makes a perineal laceration certain and insures an additional fee to the doctor for sewing it up.

No wonder that a mother warns her friends who are approaching maternity to be sure and get a doctor that uses chloroform or twilight sleep, as having babies is hell.

“Oh, ye demons of torture!” No wonder Dr. Still cried out in his disgust. It would be better for the mothers of our land if there was no doctor present than to have the kind the allopathic school furnishes.

The foregoing observations have led me to the belief that ere long, if some one who knew and learned from Dr. Still does not put on paper the principles and practices he taught, the process of making an osteopath obstetrician (the improved system of obstetrics) will be as much a lost art as the making of cremona violins.

Although I am no author and have no aspirations in that direction, I have volunteered to record in my jerky, disconnected manner my memories of what Dr. Still taught me by word of mouth and demonstration. I am sure I only remember ten per cent of what he said and am hoping others who enjoyed his personal teaching will record the same and file it with our National Association so that some day a master mind may gather the various thoughts into a harmonious whole, even as King James 1st gathered the various records and traditions of the Christian religion into one volume, King James’ translation of the New Testament.”

Now, fellow Osteopaths, if I cannot show you that Dr. Still washed my face with the sapolio of reason and polished it with the carborundum of truth, I will apologize for calling the pot black.
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As I was digging around in my mental attic looking for some reminiscence to write about for the Toronto Convention I found several Cremona and Stradivari violins, pictures by Whistler and other masters, all of which Dr. Still had given me, but the value of which I was not aware. I have since reclaimed a few of those great principles he gave me and am trying to dust them off, tabulate them and exhibit them to the profession. I am now working on the obstetrical truths, he gave me most of them in private talks.

When I was a student little attention was given to obstetrics. At the time of my graduation, obstetrics was added to the course, with Dr. Charlie Still in charge, with me doing the clinic work, and giving instruction in obstetrics. During the three years I was there I learned the regular method of obstetrics from texts. Dr. Still talked to the class occasionally but the thing he talked about most was “tongs,” which he said were never necessary at least he had not needed them, during his lifetime, as the text books we were studying taught their use we paid little attention to what he said, I just hung these masterpieces up in my mental attic where many of them have been lost among the rubbish not knowing their value. Now I am digging them out and trying to exhibit them to the profession, and if possible explain their meaning.

Many members of the older classes I am sure have a wealth of those masterpieces which he gave them, hidden away in their mental attic and I hope for the benefit of the profession, they will dig them out and brush them up and put them on record, at least put them on paper and file them in the archives of the profession. Some day a master mind will collect the scattered fragments and arrange them into a perfect whole, as King James did the Holy Scriptures.

In discussing the application of the principle of labor as taught by Dr. Still, I shall speak of only four:

1. Treatment a month or six weeks before labor is expected. Now that word treatment does not mean anything in particular. I went along doing it, however, and thought the mothers got along better for having had it. The treatment consisted of a general loosening up of the spine through the lower dorsal and lumbar regions. My final conclusions are that I was stretching the posterior ligaments of the spine so that the spine could be straightened more or given a posterior curve during labor, thus enabling the birth canal to be made straight.

2. Wait until the fullness of time, Dr. Still said, “When you start to attend a case of labor, go as though that was all the job you had to do the balance of your life.” He meant something when he he said that and I shall give you my interpretation of it. I have had no difficult cases of labor during my thirty years of practice and I attribute it to the fact that I never hurried a case and I think 90% of the difficult labors come from not waiting the full-
ness of time. Viz: many times I have been called and have found the mother apparently in labor. I do absolutely nothing to hurry matters but on the contrary use what means I have to put labor off and stop the pains. I have succeeded in many instances and labor would be postponed two weeks. I think many of those false pains are stimulated into true pains and a long tedious hard labor is the result, ending in a forceps delivery, a lacerated mother and perhaps a dead or maimed baby.

3. The third principle is the application of the force necessary to deliver the baby. When I needed more force to deliver the baby he meant exactly what the hydraulic engineer meant when he said, “Turn in more water when you want to have the press lift the load.”

The application of that principle is to stimulate the nerves to that artery so that more blood will flow into the uterine sinuses, or close the outlet through the veins by stimulating them, there being two distinct actions of the nerves to accomplish the desired results.

4. Reduce the friction and shorten the distance it has to travel. It is a known law of physics that a body will pass easier and more quickly through a straight tube than a crooked one. This principle is the corner stone of Dr. Still’s technique, straightening and shortening the birth canal. In order to make this plain I shall have to give some illustrations and different positions.

This is what I call the natural position for a woman to take during the second stage of labor. This is the position God instructed Eve to take when Cain was born and tradition has handed it down from generation to generation until the present day except when man has interfered and tried to improve nature and every time he has tried to improve on the natural position he has increased the hazards of labor. In this position the birth canal is made perfectly straight and shortened to the last degree. This is the position taken by the Indian mother when giving birth to her child. It is the position taken by all the members of the animals of the mammal group. Civilization has compelled us to treat the mother differently, we no longer allow her to go out in the woods or field to give birth to her baby as the uncivilized mother.
does or even to the far corner of her room as the Indian mother does in bad weather. We want to put her in bed with clean linen and clean surroundings but we should never lose sight of this natural position and have her take it with as little modification as possible. I will next illustrate three of those modifications.

FIGURE 2.

Figure two is the position Dr. Still illustrated to me. He put a chair in the bed and had the mother lie on it, which produced a posterior curve in the lumbar spine, thus straightening the birth canal, and allowing free passage to the child. This, I shall call the Still position.

FIGURE 3.

Figure 3 is a slight modification of the still position. I find it easier to keep the patient in this position, and a better view of the field of operation is obtained. Both have the effect of straightening the birth canal. This I shall call the Conner position.
Figure 4 is the position taken during the first and first part of the second stages of labor. These positions straighten the birth canal, direct the presenting part toward the pelvic outlet, thus preventing abnormal presentations as discussed in chapter five.

Figure 5 is the position taken during the first and first part of the second stages of labor. These positions straighten the birth canal, direct the presenting part toward the pelvic outlet, thus preventing abnormal presentations as discussed in chapter five.
Figures six and seven show an x-ray picture of a normal subject. Figure six shows the patient flat on the back. You will note the relation of the pelvis to the spine.

In figure seven you see a picture of the same subject in the Conner position. Note how much nearer at right angles the presenting parts strike the bony pelvis. I found it difficult to get a side view x-ray picture of the bony pelvis so I made a dummy to represent a normal spine.
Figure eight shows a spine with normal curves. In this position of the spine, the relation of the pelvis to the spine is at an angle of 127°, the same as figure six.

Figure nine shows the relation of the bony pelvis to the birth canal in the Conner position. You will note as in figure seven how near the angle approximates 90° or right angles. The angle is 98° or within 8° of a straight tube. This is the relation of the arch of the pelvis to the spine in the Conner position. Giving nearly a straight tube through which the foetus passes. If we could get a picture of a mother in the natural position, I believe the birth canal would be straight, and the presenting part would strike the bony pelvis at a right angle.
The Accidents and Emergencies of Labor, Their Prevention and Treatment

VIZ:
1. LACERATIONS
2. MILK LEG.
3. BIRTH MARKS.
4. POST PARTUM HEMORRHAGE.
5. PLACENTA PRAEVIA.
6. INERTIA.
7. MORNING SICKNESS.
8. PURPUERAL FEVER.
9. ABNORMAL PRESENTATIONS AND HOW TO PREVENT THEM.

No. 1. Perhaps lacerations are the most common accidents that happen to the mother during labor. Many mothers suffer through life from such injuries. Even if they are properly repaired, they don’t seem to be as well as if it has not happened. Sometimes they prove to be tragedies as in a case of third degree laceration of the perineum. If we can reduce the number or eliminate them altogether we shall only be fulfilling our duty as physicians. The object of this paper is to show you the way.

First I shall discuss cervical lacerations, a common occurrence and seldom repaired at the time of occurrence. In order to do this I must refer you to

Dr. Still’s basic law of obstetrics which was, “Straighten the birth canal.” The os uteri is attached to the brim of the pelvis by the broad ligaments which hold it in exact relation to the bony pelvis. If the bony pelvis is at an angle of 125 degrees as related to the birth canal the foetus passes through the os uteri at an angle just the same, making the stretch of the os uteri greater than if it should pass at right angles which I will illustrate by a form which I have prepared. Figure 8, with the mother in the usual position you have the baby passing through the os at an angle of 125 degrees. While Figure 9 shows the position and relation of the uterus pelvis and baby in the Conner position which reduces the angle of the birth canal to the presenting foetus to 98 degrees. If the position was the natural one I think the angle would be exactly ninety degrees; at this angle the baby would pass through the os causing a minimum of dilation and as Dr. Still told us the creator made no mistakes. We have every right to believe the opening was made large enough to pass the baby.

Figure 3. Now I shall discuss perineal lacerations, which needs little comment. Just keep the mother in the Conner position during the second stage of labor, so that the birth canal is straight and the presenting foetus strikes the vaginal outlet at right angles or nearly so and you will find the creator provided plenty of space for the baby to pass through without injury to the mother and if you think the perineum is not sufficiently strong to stand the strain you have a splendid field presented to push the foetal head under the pubic arch before the final strain is put on the posterior comisure of

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the vulva. You can by gentle pressure compress the head so that it can pass easily, and after the head is born the rest is easy and needs no discussion here.

No. 2. MILK LEG is another pathological condition from which many mothers suffer and which is the result of improper handling of the case during the second stage of labor. If properly treated during the second stage of labor this condition would never happen or if proper prophylactic treatment is given at the close of labor though the second stage was handled incorrectly no milk leg would ever occur.

In order to make this clear I will go into the anatomy of the circulation of the leg, a thing I don't like to do as I give you credit for knowing your anatomy. You are aware of the fact that all the vessels of the leg pass under Pouparts ligaments which is a very rigid structure. When I asked the students when they came before the state board the cause of milk leg they all responded Thrombus in the femoral vein, that did not tell me anything. Just as well say milk leg is caused by milk leg, they both mean the same. I wanted the cause of the thrombus and I shall try to give it to you right here.

You may have observed that milk leg usually comes in the left leg that is because the Doctor supports the right leg if he happens to be a right handed doctor. Now the left leg is left to shift for itself or be supported by a nurse who is more interested in watching the delivery than supporting the leg. Consequently she allows the leg to drop until the femoral vein is drawn tightly over Pouparts ligament and if the labor is long the vein becomes bruised or ensnared between the tissues around which the thrombus is built: as soon as it is large enough it blocks circulation and milk leg is the result.

If this line of reasoning is correct it naturally follows that in order to prevent milk leg, see to it that the nurse supports the leg properly and doesn't lie down on the job. The only time I ever spoke sharply to a nurse was once when the leg was supporting the nurse rather than the nurse supporting the leg.

Right here I would like to hand some surgeons whose patients develop phlebitis soon after operations, a little advice but I must desist.

Next I will give you the prophylactic treatment above referred to. Dr. Still told us, always as soon as the birth is completed, give each leg internal rotation to clear up the circulation to the legs and prevent milk leg.

No. 3. Just a word about BIRTH MARKS.

Bill Smith said one swallow don't make a summer neither does one symptom make a disease. Neither does curing two cases mean all can be cured, but all have some element of worth.

Birth marks, such as those red patches you see on people's faces, I have had two such cases and one of the raised variety, all were on girl babies and all disappeared under gentle massage treatment, directing the blood toward its natural outlet.

One covered the upper fourth of the face the other the middle third of the upper half. The raised one was on the top of the head much like a button one-half inch in diameter.
No. 4. PAST PARTUM HEMORRHAGES.

I asked Dr. Still what should I do in case of past partum hemorrhages, he took my derby hat I was wearing and pushed a dent in one side and said that is the condition in post partum hemorrhage and the way to stop them is to push the dent out, which he illustrated by pushing the dent out of my derby hat.

No. 5. PLACENTA PRAEVIA.

I asked him what should I do in a case of placenta praevia. He spent half an hour explaining that placenta praevia was a false alarm and how to handle it, but all the facts regarding this condition have been lost in my mental attic. If anyone remembers what he taught regarding placenta previa will they favor us with the information.

No. 6. INERTIA I have discussed in a previous chapter.

No. 7. Morning Sickness.

Just a few observations regarding this troublesome condition. I don't know why I did not ask Dr. Still about morning sickness, but I never did, so I will give a few of my personal observations.

1. A strangulation of the bowel will cause regurgitation.
2. When the patient is lying down they are seldom affected.
3. When they take the erect position the sickness begins.
4. In about four weeks the uterus gets large enough to compress the rectum causing strangulation.

5. As the patient stands, gravity draws the uterus down.
6. As the uterus gets larger it rises in the pelvis and into the abdomen and the nausea disappears.
7. Any treatment calculated to elevate the uterus in the pelvis and support it in that position will be helpful.

8. Puerperal Fever

When I was doing the obstetric work at Kirksville, word came down the line from some plug hat gentleman from down east, to douche with an antiseptic, all mothers as soon as the child was born, of course all the little fellows fell in line and began douching their cases.

I consulted the Old Doctor about it, and he most emphatically said "No." The amniotic fluid is the best antiseptic known to man, it comes from the laboratory of the Divine Builder of the universe. Why should you try to compete with the Builder of the universe, you will wash out the natural protector of the uterus and may introduce infection with nothing but your weak solution to protect the mother. The fatalities were so great the practice was soon discontinued.

I mention this to show you the implicit confidence Dr. Still had in the recuperative power of nature and nature's drugs.

An Osteopath in giving me a report on a case he took care of for me; in closing a very interesting
story, he said, "Then I gave her a shot of pituitrin so there would be no hemorrhage then went home and heard no more from the case."

When he gave that pituitrin he hog tied that uterus so that had there been any infection at all, the uterus would have been helpless to defend itself. Analyze this section and you will see the distinguishing characteristics that differentiate an A. T. Still Osteopath from an Allopathic Osteopath.

9. THE PREVENTION OF UNNATURAL PRESENTATION

The natural presentation is the head presentation. The breech presentation may be natural, too. The long axis of the uterus is vertical which causes one end or the other to present if things go normal. Now why does the face, shoulder or back present? That is what I shall try to make clear to you.

In the erect position the pubic arch supports the weight of the gravid uterus, the promontory of the sacrum and body of the 5th lumbar vertebrae push the uterus forward until it extends anterior to the pubic arch. The brim of the pelvic cavity being at an angle of 123 degrees making it difficult for the foetus to enter the pelvic outlet.

During the period the uterine sinuses are being dilated and before the broad ligaments go into action there is slight pressure on the uterine contents which pushes the foetus downward in the uterus past the pubic arch so that when the broad ligaments come into action the top of the head is driven beyond the os uteri and the contracting broad ligaments hold it there, if, as often is the case, the mother exaggerates the lumbar curve during the preliminary dilating of the uterine sinuses. When the lumbar curve is exaggerated the obtuse angle formed by the spine and pelvis is widened proportionately.

To prevent those abnormal presentations all that is necessary is to instruct the mother to take the natural obstetrical position figure 4 or 5 or in any manner you may be able to direct her, so that the birth canal is made straight by reversing the lumbar curve during the preparatory dilations.

In conclusion let me say to those who may come after me, in my vision I see a magnificent obstetrical structure of which the foregoing is the plan and specifications, blue prints and detailed drawings. The work of many artisans of the various crafts will be necessary to raise the structure, but when it is finished it will surpass the present obstetrical modus operandi, in as many ways and to as great a degree as the Congressional Library at Washington, D. C. surpasses the Indian tepee.

July 8, 1927.
THE MECHANICS OF LABOR

Price: Per Volume, Cloth, $3.00; Paper, $2.00.

DR. W. J. CONNER

505 Commerce Building. Kansas City, Missouri.