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REMARKS ON THE WRITINGS OF LOUYSE BOURGEOIS.

BY HUNTER ROBB, M. D., *Associate in Gynecology.*

[*Read before the Historical Club, May 8, 1893.*]



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Shortly after being asked by the President of our Society to read a paper on Louyse Bourgeois I wrote to Prof. Goodell¹ of Philadelphia, who was kind enough to send me a copy of a paper on the same subject which he prepared as the annual address before the Philadelphia County Medical Society in 1876. Some of my hearers have no doubt read this address, and for those who have not done so there is a treat in store whenever they can lay their hands on a copy. They will find here not only an excellent sketch of the life of this celebrated woman and of her career as a midwife, but also a graphic picture of certain phases of court life as it existed at that time.

The first edition of Louyse Bourgeois' works on Obstetrics appeared in 1608. A second edition in 1617 contains an additional book with a long list of clinical cases, and the account of "How she became a Midwife," being followed by "A true Description of the Births and Baptisms of the Children of France," and "Advice to my Daughter." Under the date of 1626 there is another edition augmented by a third book. In 1634 the sixth edition appeared with an appendix, "A Collection of the Secrets of Louyse Bourgeois," of which last we may say, "Good had it been for that book had it never been published." The dates in the edition which I have been studying are 1652 and 1653.

The life of Louyse Bourgeois has been so well put before us by Prof. Goodell, and he has given such an excellent and entertaining account not only of the woman but of the royal midwife, that there seems but little left for me to do. I

¹ I have also to thank Prof. Goodell for the loan of the woodcut which accompanies this article.



have therefore refrained from going over the ground which he has covered, and have contented myself with going a little more into detail in the discussion of her first and greatest book. It is only necessary by way of preface to say that Louyse Bourgeois was born in 1563 just outside the walls of Paris. She married Monsieur Boursier, a surgeon who was an assistant of the celebrated Ambrose Paré, many of whose precepts are no doubt embodied in this work. She was mid-



wife to Marie de Medici, wife of Henry IV of France, and she was the first midwife to write a book upon the subject of obstetrics. She lived to a ripe old age, but the date and place of her death are unknown.

The title-page of this work is adorned with an allegorical picture showing the Assumption of the Virgin and Child at the upper portion of the page, with the Pope kneeling on one side and a figure of John the Baptist on the other. Lower

down on either side is a figure, one with a child in her arms and bearing a cornucopia with the legend "Timor Dei." The other, bearing the legend "Gratia Dei," has a palm in one hand and a basket in the other. Beneath the right-hand figure there is a child lying on a sheaf. Between these two figures is a scroll on which the name of the book appears; just above the scroll is the lily of France, just below the name of the bookseller. At the bottom of the whole picture is the inscription, "Natura humana fragilitas humana."

The queen to whom she dedicates the book was Marie de Medici, wife of Henry IV of France. The work is divided into several parts. The first book is entitled—"Divers Observations on Sterility, Loss of the Ovum after Fecundation, Fecundity and Childbirth, Diseases of Women and of Newborn Infants—amply treated of and practised with success by L. Bourgeois, called Boursier, midwife to the Queen. A work useful and necessary for everybody." The language throughout is very quaint old French and is at first more or less confusing. One is again and again reminded how closely the French is connected with the Latin; for example, the modern word for bed, *lit*, no doubt is derived from the Latin *lectus*, a couch. In this book it is spelled *lict*, the *c* being retained, and similar instances occur throughout the work. In the edition I show you to-night the Observations are divided into three parts, and although there is no date on the title-page of the first book we have on the first pages of the other two books the date of 1652. To these three books there is added a work entitled "A Collection of the Secrets of Louyse Bourgeois," published in 1653. In the first book of the *Secrets* she gives the treatment for internal diseases—headache, hydrophobia, catarrh, for which she declares that she has a sovereign remedy but says it is very difficult to make, although this probably will not account for the fact that it is not used at the present time. Then comes a long chapter on the treatment of the eyes. For the treatment of deafness and the teeth she has quite a materia medica. She also considers diseases of the chest, coughs, pleurisy, etc. Fevers are then taken up. In speaking of the plague she says a piece of the root of *enula campana*, the size of a pea, held in the mouth is a certain prophylactic, and if one has the disease already it will cure it. She also considers the diseases of the liver and kidneys, dropsy, gravel and stone in the bladder, and next the diseases of

the intestines, such as diarrhœa, or "flux of the belly" as she calls it; for the last she advocates the milk of a cow, goat or sheep, which should be milked on the day of St. John the Baptist, namely, on June 24th; of this cheese is made and it is given to the patient to eat. For hemorrhoids she has a great many prescriptions, mostly salves. She also has remedies for neuralgia. In the next section she speaks of poultices of hot apples for inflammation or for curing tumors. For cancer she recommends egg-shells prepared in a peculiar manner and given to the patient to eat. She also gives an ointment for swellings and old ulcers and "things that have been pronounced incurable by other people." She also gives all sorts of remedies for dog-bites. In the third section she returns to the diseases of women.

In speaking of the remedies for diseases of women before marriage and during pregnancy, during and after labor, she recommends that the breasts should be kept firm so that they never may hang down, by rubbing on them the egg of the partridge. She quotes Pliny in support of this treatment. Then she speaks of what she calls embellishments and gives her prescriptions for taking away smallpox marks and making the face beautiful and white, and for doing away with warts, moles and freckles, and which are also for beautifying the hands. She ends up with a list of remedies which are good for almost anything. She has a very fine pill which she describes as being good for many kinds of pains and poisons, and the frequent use of which preserves from syncope and trembling and renders the chest sound and well.

She also has what she calls an *eau celeste* which has all the virtues and properties which are hereafter noted. The description of its virtues and properties takes up about two pages, the recipe itself about one and a half. But I spare you.

To return to her first book of the "Observations." After the usual references to adverse critics of which the writers of those times were so fond, she writes a preface to the Queen and to the reader, pointing out that her great aim is to enable the reader to regain the precious flower of health. Then there are a few verses to various persons, one to each of the several court physicians.

She starts out by describing sterility and its causes. While recognizing the fact that it is possible that the man is at fault in some cases, she holds that the condition is usually due to

some disease of the woman. The most frequent cause is the fact that the female sex is extremely humid but nevertheless choleric. Now the uterus is the receptacle to receive the life of the blood and to expel it from the body. Those women that abound more in choleric than in good blood are likely to produce moles or bad germs, because nature, wise as she is, cannot make a good garment out of bad stuff. Such women ought to be bled and purged, and should not allow themselves to give way to fits of anger. She says that in these cases an external examination will be of no use, for the malady is an internal one, and when recognized by the skilled physician can easily be cured. Now there are others again, she says, who are sterile from too great humidity of the uterus. The humidity coming from the brain and passing down the spine and back, moistens and cools the uterus until there is so little of the maternal heat left that the substance out of which the fœtus is to be nourished cannot be preserved. She recommends medicines which will act by drying these up, and says that the physician should address his efforts to the stomach, as to a bad cook who neglects his duty and will not cook the food which can be made to serve for a nourishment of the whole body. "These remedies will cure the patient to the content of the physician and that of the patient as well."

Then she speaks of *leucorrhœa* and the *retention of the menses*, the latter of which she thinks is likely to lead to cancer, and recommends internal rather than external remedies. She says that there are some women who have a cold humor which blocks up the entrance of the womb and sometimes causes displacements.

Another cause of sterility she holds to be a long and hardened cervix, which instead of presenting the appearance of the mouth of a purse looks like a flageolet, and prevents the menstrual flow from getting out, the retention causing vapors in the brain and "marvelous suffocations of the uterus," in some women causing convulsions, and movements of the uterus as if there was something rolling about inside the body, and the women then think that they are pregnant and avoid anything that will tend to disperse the humor. A skilled midwife recognizing this elongation of the cervix would know that it could not possibly be the cervix of a pregnant uterus, but that the enlargement is due to retention of the menstrual flow. She quotes the case of a woman between forty-eight and fifty

years of age who never had any children, but had milk in the breasts, with great enlargement of the uterus, attacks of vomiting, and desire for strange foods, and thought she felt the uterus move. Louyse Bourgeois distinguishes between the movements of the fœtus and these false movements—"A child will make a little movement just like the beating of the wings of a little bird." The movements of the non-pregnant uterus she compares to those of a cat sitting in front of the fire and arching its back. She says that women feel sick at the monthly periods because the vapors of the uterus are sent up to the brain and fall back again on the uterus, just as when a pot is boiling the lid is lifted up and allowed to fall again. The condition is relieved by clysters. She quotes the case of a woman whose abdomen was enlarged as if in the ninth month of pregnancy, who had such suffocations of the uterus that she had a convulsion every hour. She was purged, bathed and bled till at last the doctors gave her up for lost. She remained two days without any medicines at all and the attacks got worse. At this time Louyse Bourgeois was called in and persuaded her to take a fumigation which attracted the uterus downwards. The patient then had labor pains, brought forth a thing which looked like clotted blood, half-decomposed and stinking so that no one could stay in the room, and soon became better. With great modesty Louyse Bourgeois attributed the cure not only to the fumigation but to the treatment received from the doctors beforehand. She then talks about cases of amenorrhœa with vicarious hemorrhage from the nose.

Another cause of sterility she attributes to the habit of drinking too strong wine and eating highly seasoned foods, which act by heating the blood too much and consuming the fluid. "Such women are subject to ulcers of the veins and uterus." She evidently has seen post-mortem examinations, because she says she has seen opened several bodies of patients who had died from this. She recommends all such women to apply at once to physicians or good midwives. Her account of *chlorosis* is excellent. She says that it was supposed to be very often due to being crossed in love. She cured a young man of chlorosis who was in love with a girl and had one or two relapses until he gave up his hopeless suit. Still in many instances, more especially in girls, she confesses that the patients were too young to know anything about love. She

anticipated modern treatment by prescribing iron and purgatives.

Among the causes of abortion she says the principal one is paroxysms of anger, and she warns such women to consider the evil that they bring about, in that they prevent the perfection of the work of God, having received a human soul from God to glorify it eternally which they have not guarded, and thus have done violence to the holy sacrament of baptism. There are some, she regrets to say, who although this catastrophe has been brought about by their own fault, will argue that the child not having lived had no soul. For such sinners she has a fearful denunciation. "Although human laws condemn to death those who destroy the beings, which are not created but for the use of man and have only a vegetative soul, what punishment is meet for her who wilfully prevents the birth of an infant who has a vegetative, sensitive and reasonable soul? Again, what might not the child become in the world?" Evidently the authoress is very much impressed with having assisted at the entrance of royalty into the world, and is deeply imbued with the extreme benefit which such personages confer upon mankind. "What is commonly called willful abortion is punished by the laws of man; and those who cause abortion from want of forethought or carelessness, though they escape punishment in this world, can they hope to avoid the just laws of God?" Nor do those who lend themselves to the production of abortion escape her condemnation.

Pregnancy she points out is generally accompanied by some pathological symptoms, such as debility and perverted appetite. She warns her patients to control themselves lest they should produce abortion, or lest their children should be born with marks upon them. She warns against too great eagerness to know whether pregnancy exists or not. "Miscarriages have been caused by unskillful and over-anxious midwives, who have thrust their finger into the uterus and have caused hemorrhages which resulted fatally to the fœtus." She says that during the first and second months a competent midwife can diagnose pregnancy on finding the os open; after this time a certain diagnosis is impossible, "because the mouth of the uterus being closed, the enlargement she feels may be due to retention of menses, and she must depend on other signs."

"If the mother is full-blooded, and if the infant is not able to use all the menstrual flow for its nutrition, and the remain-

der is too great to be absorbed by the breasts, it must find some outlet from the body." This she holds to be an explanation of the fact that some women appear to menstruate during pregnancy. In these cases she recommends bleeding at certain intervals. For those who are feeble and emotional she recommends wine and meat, but she begs them to try to control their emotions; for she says such emotions make the woman swell, so that the uterus being pressed upon opens and casts the infant out. She attributes miscarriages from falls, etc., to undue relaxation of ligaments of the uterus. Such a misfortune may also be caused by raising the arms too high up, and she therefore cautions ladies of quality to beware how they exert themselves in doing up their hair, and tells her more humble clients that hanging out linen is very often prejudicial to their condition. She points out the difference in this matter between women bred in the country and those who are town-bred. For pregnant women who have fallen or who have otherwise injured themselves and are threatened with miscarriages she recommends rest in bed and a recipe which she says has been successful in more than two hundred cases of her own.

She then speaks of hydrocephalus, and attributes this to the same cause that brings about premature birth, namely, that the infant has found insufficient nourishment for its proper growth. She compares a premature infant to a good general of a besieged city, who, finding his provisions exhausted, accepts the situation and capitulates. She recognizes in certain cases the necessity of bringing on premature labor. She deplors the fact that certain midwives never call in a physician until the case is practically lost. "Such women are those who prefer filthy lucre to true honor, and keep their establishments full of women who have no husbands." She thinks it only right to say that physicians attending midwifery patients should cease to attend cases of smallpox and other contagious diseases.

In making the diagnosis of pregnancy she recommends the midwife to ascertain the date of the last menstruation, as well as the color and quantity of the flow. "Some women have amenorrhœa from fright and emotion, and we should inform these that there is no sign of pregnancy. Other women we should remember may suffer from amenorrhœa without being pregnant. We should inquire whether their

appetites are changed or are capricious, and if they have desires for strange foods, whether, as is the custom in pregnant women in the first two and a half months, their bellies seem very flat so that they think their clothes are going to fall off of them, or whether they suffer from hypersensitiveness of the skin." She adds a list of other symptoms: (1) palpitation of the heart; (2) morning vomiting; (3) general irritability; (4) enlargement and firmness of the breasts; (5) change in the color of the nipple, which becomes red in blondes and darker in color in brunettes; (6) enlargement of one side; (7) a feeling of heaviness after eating. Lastly she recommends a digital examination in order to find out whether the mouth of the womb is shut "like the mouth of a bag through which you cannot push a grain of wheat." "Above all never try to push the finger into the uterus, and be sure that the cervix is not hard, because, as we said in the beginning, this occurs in sterile women."

Talking of moles, she says that they absorb the blood like a sponge. Women in such cases grow large all of a sudden, and are more swollen at the end of a month than a pregnant woman at the end of three months.

In case of an accident to a pregnant woman which would otherwise prove fatal, premature labor should be brought on, no matter at what period, in order to preserve her life.

After speaking of the behavior of the midwife in case of premature labor, in the next chapter she goes on to speak of births at term where the infants do not present well, and of the various presentations, of which she mentions twelve. (1) The worst one of all is the presentation of the navel, when the belly comes first, the legs and arms being behind and the cord prolapsed. She suggests turning if possible, and says that such presentations are generally fatal unless the infant is small and the body, *i. e.* the pelvis, of the woman is large. If possible, the cord should be replaced. The accident is dangerous "because the cord gets cold and the circulation is interfered with and the respiration of the child stops. For while in the body of the woman he breathes through the cord because he is swimming in water, and he cannot like a fish breathe through his nose without getting his mouth full of water." She suggests putting the woman across the bed with the head low and the hips elevated, so as to assist the presenting part to go back, and then having greased the hand with

fresh butter, to try and bring the legs down, pulling gently on the child during a pain. (2) For a transverse position, which she considers about as bad, she suggests also bringing down the feet. (3) In a shoulder presentation she recommends turning, and after allowing the patient to rest, that she should be placed in a convenient chair when she has pains, so that the weight of the head may bring it down. (4) When the arm presents she says this must be replaced instantly, the best way being to have a bowl of cold water ready and to allow the infant's hand to rest in it, whereupon it will pull it back very soon. If, however, it is too feeble to do this, grease the arm before it has time to swell, replace it gently, and then turn by the feet. (5) If two hands present she recommends that these should be replaced in the same way, and the midwife must then decide whether it is better to bring down the feet or try to make the head present. (6) If one foot presents, and if the pains are strong, she tells the midwife to bring down the other foot as well. If the pains are feeble the patient should rest and a clyster should be given to produce a stool and at the same time to bring on the pains. (7) If the breech presents she says that it is very dangerous to allow an infant to come out doubled up, and recommends the midwife to bring down the feet. (8) The prolapse of the cord in front of the head she holds to be due to too much amniotic fluid. "On no account should the woman be allowed to stand up or sit in a chair. She should lie down with her head low, the cord should be replaced, and a pad of cotton should be thrust in where the cord is trying to come out, just like a cork into a cask." (9) The presentation of the hand before the head. (10) A face presentation, she says, can be mistaken for a breech presentation, and she recommends the hastening of labor by stimulants or, if necessary, by an injection. (11) When the head presents more on one side than on the other she says the condition is very annoying, because it may be mistaken for a normal presentation. The patient should be put on her side so that the weight of the head will bring it into the middle. If this is not successful some manipulation will be necessary. (12) Even in the real normal presentation, when the head comes down in the middle line, she holds that the aid of the midwife is necessary. Sometimes the cord is entangled about the neck and must be disengaged. If this cannot be done, the cord must be cut and disentangled and both ends

ligated. The ligation of one end is necessary in order to prevent the infant from losing blood; to the other end a string must be tied, which is fastened to the thigh of the woman for fear of losing it. The midwife must be prepared for another accident, as sometimes after the head is born the shoulders are large, and it may become necessary to pass the finger under the armpit and make traction.

In Chapter VIII, premature rupture of the membranes is described. She says: "I have seen cases in which the membranes ruptured twelve, eight, six or four days before labor. If labor does not come on two or three hours after rupture then it will not come on for at least twenty-four hours. The rupture is due to weakness of the membranes rather than to an excess of the waters." She deprecates the rupture of the bag of waters purposely, for several reasons—(1) Because it may produce prolapse of the cord, or (2) prolapse of the hand or foot. She prefers to try to give strength to the mother that she may rupture them by her own efforts. "This premature rupture is considered very dangerous to the child, but in cases where the rupture has taken place twelve hours before labor there remains sufficient amniotic fluid to moisten the natural passages. These can also be lubricated by means of fresh butter." She warns women, however, in whom rupture of the membranes has taken place, not to go out of doors for fear the air may enter the womb. She says that she has seen cases in which the air did enter the womb and compressed the vessels, and the woman had convulsions. She begs them "to remain in bed and await the hour of God."

In speaking of false labor pains she says they are due sometimes to colic, sometimes to other intestinal disorders. "Colicky pains, if they begin above, never pass below the navel, and if they begin below, never pass above it. For these pains try hot linen, and if they are colicky pains they will pass off; if a real labor pain, this treatment will increase it." She also advises a vaginal examination.

As to the position of the woman during labor. "A woman who wishes to keep about and can do so until she is just ready to give birth to the child, may be allowed to stand with her legs apart, supported during the pains by two strong people, or she can have a low stool with a pillow on it, in front of a table, and can kneel on the pillow and put her arms on the table." Our author, however, prefers to keep the patient

in bed unless the labor is too long, and does not think it advisable to let the woman leave her bed at any rate after the head has engaged in the os. With this limitation, if it comforts the woman (and she thinks the woman needs comfort at this time), she allows her to do as she pleases, especially as she says that she has often seen patients made worse by being forced by too solicitous mothers to keep in bed.

The bed itself ought to be high at the head and coming to a point at the foot. A large faggot placed in such a way that it will touch the feet when the legs are not fully extended should be used to hold the feet. There are some women who, on the best of beds, think they are going to be suffocated. These women she says she has delivered sitting or standing up. She has known cases where the child was delivered with the mother in this position in the absence of the midwife, when the woman was not expecting it, and falling on the floor, has been killed.

She says although it has been denied by some that twins are ever of the same sex, this idea is contrary to her experience. "In the case of twins the labor is longer. Sometimes the first child comes well and the other badly. It is certain that the first born is the stronger because it has broken through the membranes first. In one case a second child was left to nature and was born twelve hours afterwards, and though it lived, it was at first very weak." In such a case she thinks that nature ought to be aided, the labor pains excited and the bag of waters ruptured. If the second child presents badly the membranes should be ruptured, and turning by the feet performed. The cord of the first child should be cut and ligated before the second one is born.

With reference to medicines which are to be given to a woman in labor, she is not in favor of employing violent remedies unless in cases of extreme necessity, "as this procedure is apt to cause marvelous fevers after child-birth." The two extremes must be avoided, "repletion and inanition." Nourishing broths, the yolk of an egg, and ammonia water to fortify the heart are recommended. "Not too much, however, for fear of causing fever." She mentions other recipes, but prefers that the doctor should decide what the patient should or should not take. She gives recipes which are recommended by learned physicians, as in some cases the idea of sending for

a physician frightens the patient unnecessarily or makes her believe that the midwife is incompetent.

The Delivery of the Afterbirth.—To make the diagnosis she places the infant on the edge of the bed with the head and abdomen covered, taking care that nothing touches the face; then with the hand on the abdomen of the woman she finds out on which side the placenta is situated. Friction being made on the side where the placenta is found, the woman is ordered to close her fist and blow into it, or put her finger into her mouth to produce nausea, or to strain as if she was going to stool. If this does not succeed, she is made to take the raw yolk of an egg. "The knowledge that the egg is raw produces nausea and excites the stomach, and often even the thought of it will have the same effect. Asafœtida and such like remedies may be useful." In two thousand labors she says that she has never had occasion to put her hand into the uterus to get the placenta except in two cases. The one case had been mismanaged by another midwife; the other one was of fever, where the uterus was so dry that the placenta could not be expelled. She gives three rules in which this procedure is justifiable—(1) If the woman is bleeding, (2) where there are convulsions, (3) when the woman has fever and the womb has become too dry. She has seen bad results in cases where doctors and midwives have been too hasty in this matter.

Chapter XVI deals with the after-pains, which are said to be often due to rolling of the uterus in the belly and to displacements.

Post-partum hemorrhages (she holds) occur in some women because they have too much blood, and in others because they have taken too many heating remedies during their labor, so that the blood is heated and hemorrhage occurs. This is followed by great weakness, which must be met by wine in small doses, and by a moderately tight bandage, which she thinks compresses the vessels. The white of an egg is recommended to restore the natural heat of the stomach, which is diffused all over the body, and at the same time along the spine, over the course of the vena cava, a napkin which has been wetted with a mixture of vinegar and water should be placed. She does not allow the woman to go to sleep while the bleeding is going on, because she thinks that she is more likely to die under these circumstances. When the hemorrhage is partially controlled she orders that the astringent be

taken off and a little of the blood allowed to come away slowly, so that it will not do harm by remaining in the womb.

Chapter XVIII treats of the puerperal state. "As soon as the woman is delivered, after a hard labor she must be put in the skin of a black sheep which has been flayed alive. This is applied to the back. To the belly is applied the skin of a hare which has also been flayed alive. The animal having been flayed, its throat should be cut and the warm blood should be rubbed on the inside of the skin and applied to the body of the woman. This blood chases away the melancholic blood. In winter these remedies must be kept on two hours and in summer one hour." She then describes rather a complicated abdominal bandage which she was in the habit of using. "After this is taken off, hot linen should be applied to the breasts for about twelve hours before giving proper remedies for producing milk." "These galactogogues should not be put on till later, because the blood is still too excited."

For women who have little blood she orders nourishment. She has found that those who lose but little blood are apt to persuade themselves that they would be better if they lost more, so that they want to be bled. She warns the doctor not to listen to the entreaties of such patients. "Some women whose discharges are white think there ought to be blood in them, whereas these white discharges are in reality blood which has gone to the breasts to be made into milk, and not having been utilized is returned to the uterus, whence it is discharged."

She expressly states that the rules of life are not the same for every woman in the puerperal state, and that one cannot give the same diet to a society lady in town and the peasant woman in the country. "The stomach of the one is stronger; if you offer it soup it acts like a mill that is grinding without anything in it. To delicately nurtured women give very light diet, soups, jellies of veal and chicken, but not of mutton, for fear of fever, and the wine should be diluted. Combat insomnia by barley water. After eight days the nourishment can be increased."

For eight days after labor she recommends a daily injection of honey water with extract of roses, holding that milk is dangerous and is not so cleansing.

Chapter XXIII treats of antigalactogogues. "There are many such remedies. Some nurses use their favorite remedy

on all their patients. This is just like applying the same saddle to many horses." "These," she adds with scorn, "are often secret remedies." She expresses the opinion that although some people say that a midwife need not be a nurse, no woman unless she is a good nurse can be a good midwife. Then she speaks of inflamed breasts and suppuration. She says that she has known cancer to come from unwise applications to the breasts. She mentions an autopsy in a case of cancer in which in the uterus were found great red tumors, which were caused by the milk which had been present since the birth of the last child, and having returned from the diseased breast to the uterus had brought with it some of the cancerous growth. She holds that this could have been avoided by proper applications to the breasts. She recommends great care where the breasts have been fissured by the infant. She warns against the danger of catching cold in the breasts.

The taking of drugs by the mouth in the first days of the puerperal state she thinks dangerous.

The care of the newborn child. "It is the custom of learned doctors to give to the child as soon as it is born a teaspoonful of pure wine to revive it after the agitation it has gone through in being born. Others believe that wine cuts the phlegm which is ordinarily found in the throat. Others again believe that the vapor of the wine mounts to the head and makes the brain firm. Such children are thus protected from epilepsy in after life, since epilepsy comes from debility of the brain. The umbilical vein should be ligated firmly, and if it be full of blood it ought to be emptied, for fear that this should turn into pus. It should be ligated two finger-breadths away from the belly, and cut three finger-breadths below the ligature. If the cord is large and full of water and of winds, after the end has been wrapped in linen for half an hour it should be unwrapped and ligated afresh. It should be placed with the end upward, as there is thus less danger of bleeding. The infant should be washed in warm wine and water, walnut oil being employed for the face, throat, arms and hands. Bandaging the head is a very bad practice common in Paris and ought not to be employed. The tongue should be examined to see if the child is tongue-tied, but the frenum should not be ruptured with the finger, because the nail is poisonous and may produce a canker or an ulcer." She begs the lady friends of the family not to interfere too much, but to leave the care

of the child to the midwife. She deprecates the practice of trying to form the face or head by pressure, "as if the child were made of wax or putty."

Chapter XXVII refers to the choice of a nurse. The following are her rules. (1) See that the woman does not squint, as the infant may catch it; (2) she must not have red hair, because the milk of such a woman is exceedingly hot; (3) let her have good white teeth; (4) let her not have a family history of phthisis; (5) she must have a pure breath, otherwise the lungs of the infant will be irritated; (6) she must have a good digestion; (7) there must be no family history of leprosy, epilepsy, or any other disease. She quotes the case of a child who caught epilepsy from a nurse, a child of very good family. She holds that the moral character and disposition of the infant depend on that of the nurse, and that therefore the disposition of the nurse must be good. "She must not be irritable, and she must have milk in abundance, but not too large mammary glands." She thinks that the nurse will not be so good if she has her menstrual flow or if she has connection with her husband.

After treating of colic and the minor ills of children she comes to *cancerum oris* and cases of prolapse of the rectum. To remedy the last the child must be put with its head low and the bowel reduced, and she tells us that as the infant grows older the anus becomes smaller and the intestine bigger, so that the condition is finally cured. She orders the application of a bandage to be kept on all the time except at night.

After giving recipes for ointments for making the limbs strong she speaks of falling of the womb, a condition which she attributes to accidents, carrying heavy burdens, working too hard, and bearing large infants. "Sometimes part of it is pulled out by unskilled midwives in their attempts to deliver the placenta." She prescribes rest in bed, but says that it is no use to treat the symptoms without finding out and removing the cause. She recommends astringents with suppositories (or pessaries). "The pessary should have a hole so that the vapors of the womb can come out. It should be taken out occasionally to be cleaned. Such women should not lace themselves tight, for after labor they will have a proportionately bad figure."

She insists that a midwife should be acquainted with the anatomy of the uterus. "If she does not know this she may

try to expel the uterus instead of the placenta, as has been done in this city." Therefore she begs of the doctors to allow the midwives to attend their lectures on the subject, the midwives paying for the same.

In speaking of a case of hydrometra she tells of a woman from whom there came half a bucket of water three months before labor. At the end of six months of pregnancy she experienced great pain, extreme tension and hardness of the belly, which seemed as if it were going to burst. The author gave her a carminative enema with some relief, but a month later, having the same pains and while pacing the room, the woman felt a great flow of water come from her, as if she had opened a water-tap. Louyse Bourgeois happened to be in childbed at that time herself and could not go. Two months afterwards the patient was delivered. The bag of waters was intact, "which shows that the water that came from her was not from the bag of membranes, but rather from dropsy of the womb."

Chapter XXXIX is interesting as it gives us the signs by which the death of the fœtus was diagnosed. It treats of a woman who was supposed to have labor pains at seven months, but Louyse Bourgeois diagnosticated a colic. After this there were no movements of the child. On examination the cervix was found to be slightly opened. She concluded on account of the colic that the infant had attempted to come from the womb and had died in the attempt. Two physicians and Madame Françoise, who was a midwife, were called in consultation. It was concluded that the infant was dead from the following signs:—(1) the woman's breath was bad; (2) her excrement was very strong-smelling; (3) her eyes were dim; (4) her belly was cold; (5) when she turned on her side the belly all went to that side in one mass. Cæsarian section was suggested, but the physicians decided "to leave the affair to God and to nature." The patient was in bed six weeks. "Two months afterwards she came to me saying that a large quantity of water as cold as ice had come away from her. I found the cervix dilated and she gave birth the same day to a fine female child. Her trouble was caused by drinking cold water, which gave her the colic and chilled the child."

Our author sometimes performed surgical operations herself, for she states that once she extracted a stone as long as a man's finger from the neck of the bladder.

She then narrates several cases. "A lady was delivered of two children, one dead and half rotten, and the other alive and well. The waters of one infant were all black, and the infant was dead and much disfigured and a horrible sight, and had no epidermis. She then bore a live child immediately afterwards."

The second is a case of lithopædion. "A lady was delivered of a dead child from whom she had felt no movements for several months and which was born dead. The woman had felt no movement for a month. Heat was applied to the abdomen and something was felt to move up inside. This was undoubtedly the uterus, which being chilled by the dead child moved towards the heat. The woman had none of the ordinary signs of the death of the child, which is explained by the fact that the waters being cold they hardened the child and there was no putrefactive process."

Third case. "A lady in her first labor bore a dead child and was badly nursed. Five or six days afterwards she became insane, and in spite of her husband, ran about the streets naked. Four years afterwards she recovered a little and bore a child without any accident. Ten years later she bore two children, one dead and one alive. On the fifth day she became insane. On the fifteenth day, as she seemed somewhat better, her guardians relaxed their watchfulness. She escaped and flung herself down a privy, a thing which in her previous attacks she had tried to do. She was caught by the scaffolding and saved. After ten months she got better and again became pregnant. I had her milk drawn, as she had never nursed her children. On the fifth day she showed signs of insanity. I attended her breasts, gave her an enema, and the next day she was better. I have no doubt that the insanity was caused by the abundance of milk. In these cases there is acute fever. The heat goes to the head, the body gets cold, and the patient has chills. The lady became again pregnant, and following my advice (that is to say, by the use of enemata) she avoided all evil results."

The next case is that of a woman who died from eating ice. "Attempts were made to bleed her, but no blood was obtained. She died within twenty-four hours. At the autopsy all her blood was found to have gone between the epiploon and the intestines, a vein having ruptured. This was brought about

by over-distension caused by the ice. Except in the abdomen, not a drop of blood was found in the body."

With respect to premature births at the seventh and eighth month, she thinks that some infants are born too soon from healthy women simply because the uterus is small, and that in other cases the accident is brought about by falls. If the placenta is broken off so that the child cannot breathe, he is drowned in the waters or is suffocated for want of air.

The story of the woman who bore on her nipple a serpent for ten months, as well as the long list of infallible remedies which are scattered all through the work, proves that Louyse Bourgeois, with all her good sense, was not entirely free from credulity. But it is not only in the works of our author, or indeed those of others of the older writers, that chaff is to be found mingled with the wheat. To those who are inclined to criticize too severely, and who would dwell upon the credulity of the woman (a thing by the way which exists even in our times), and on her too ready belief in the infallibility of her own remedies, we would say, "Let him who is without sin cast the first stone."

Throughout we can see the sound common sense, the patience and, what is quite as important, the earnest desire to deal with cases not in any routine way, but to look at each by itself and seek to remove the cause rather than attend only to individual symptoms, which gave to Louyse Bourgeois her well deserved pre-eminence in her profession, and make her work not only interesting, but of much practical use to us of the present day; for without these qualities, in spite of our better opportunities, we cannot expect to obtain good results.

