

## MONTGOMERY AND THE FOLLICLES OF THE AREOLA AS A SIGN OF PREGNANCY (1837)\*

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**F**OR over a hundred years, teachers of obstetrics in many lands have described the presence of "Montgomery's follicles" to their classes as a sign of pregnancy. During this century, it is very likely that neither the lecturers nor the lectured knew anything about the career of Montgomery (Plate 1), even though he was sufficiently famous in the speciality for his name to be associated with his sign right down to the present day. Being one of those who knew nothing about him, a resolution was made many years ago to find out the details of the career of this world-famous obstetrician. However, for one reason or another, the necessary research was never begun and it required the stimulus of two incidents to get the project under way.

Some years ago, the late Professor William Doolin presented framed drawings of Bartholomew Mosse, Fielding Ould and W. F. Montgomery which were to be hung in the Professor's room at the Rotunda Hospital. Each bore a facsimile of the signature of the celebrity concerned. Bartholomew Mosse and Fielding Ould were recognised at once as the founder and first Master of the Dublin Lying-in Hospital and his successor in office respectively. When the third picture was examined, the question naturally arose as to whether this Montgomery was the one whose name is associated with the follicles or tubercles in the areola. Then came the second incident. This occurred a few months later, when Professor Doolin, acting in his capacity as Editor of the *Irish Journal of Medical Science*, sent a book for review which proved to be a mine of information concerning the famous names which embellish the terminology of obstetrics and gynaecology. The work, *Obstetric and Gynecologic Milestones* (Essays in Eponymy), was written by Harold Speert, M.D., of the Presbyterian Hospital, New York, Assistant Professor of Clinical Obstetrics and Gynecology at the Columbia University College of Physicians and Surgeons. Published by the Macmillan Company (1958), the book consists of independent essays describing over ninety of the names famous in the speciality. Eagerly the index was sought to see if Montgomery's name was included, and happily chapter 25 was found to be devoted to the work, the career and the fame of W. F. Montgomery.

The purposes of this paper are to acknowledge the debt of the profession to Dr. Speert for his collection of biographical details, to add some extra facts about Montgomery collected from local sources which were not available to Dr. Speert, and to record, in the *Irish Journal of*

\*A paper read at the Section of the History of Medicine, Royal Academy of Medicine in Ireland, on 28th April, 1965.



PLATE I

*Medical Science*, the interesting story of a celebrated Dublin obstetrician of the past.

Before the specific biological tests and the use of *x*-rays became available for the diagnosis of pregnancy, the physician's only means of reaching a diagnosis was by the interpretation of the various bodily changes which the pregnant state produced. Blueing of the vagina appears to have been the first sign of pregnancy to be described, by Jacquemin about 1835, and later by Jacquemier and Kluge about 1846 and Chadwick in 1887. Breast changes as an aid to diagnosis of preg-

nancy were first adequately described in English by W. F. Montgomery in a volume published in London in 1837 (*An Exposition of the Signs and Symptoms of Pregnancy etc.* Sherwood, Gilbert, and Piper, Paternoster Row, London, 1837). (See Appendix A). In later pregnancy, the alternation of painless contraction and relaxation of the uterine muscle, described by J. Braxton Hicks in 1871, often led to accurate diagnosis. Subsequently, the selective softening of the isthmus of the uterus, which formed the basis of Hegar's\* sign, was noted in 1884. From time to time physicians have differed in their interpretation of these signs of pregnancy, while others have relied more on breast changes in diagnosis. Montgomery was foremost in the latter group and described in the most minute detail the changes to be noted in the breasts, some as early as the ninth week of gestation, in addition to their diagnostic significance. Speert, H. (1958) has commented:— "Montgomery's chapter on 'Mammary Sympathies', containing his description of the breast changes of pregnancy, has never been improved upon."

Montgomery was well aware of the value of blueing of the vagina as a sign of pregnancy, for he wrote in his preface :

. . . and I have endeavoured to notice every recent discovery, or suggestion made up to the present day, as fully as my own knowledge enabled me to do, or their value appeared to deserve; and, of one of these, I wish to observe here, that since I wrote the remarks in p. 126 on the purple colour of the vagina, asserted by Kluge and Jacquemin to be, invariably, an attendant on pregnancy, I have examined a few more cases, and, while, in some of these, its existence was very obvious, in others, it was so slight as to be scarcely, if at all, perceptible.

On the other hand, he attached greater importance and significance to the pregnancy changes in the breasts and areolae as a sign of pregnancy, for he continued in the preface :

A still more full and minute account is now given of the changes observable in the breasts and their areolae, and of their value as a sign of pregnancy, which, by singular good fortune, I have been able to illustrate by a series of drawings taken during a first pregnancy, and representing those changes from the third month, up to the time of delivery; and I believe that such a series of illustrations are now, for the first time, laid before the profession. I wish here to repeat, that my confidence in the condition of the areola as a diagnostic mark of pregnancy is, not only, unabated, but, very much increased by further observation; and I rejoice to find, that Dr. Hamilton, who has recently published his opinion on this important point, and whose support and confirmation of my views are, as they ought to be, so highly gratifying, has drawn the same conclusion from forty years' examination of the subject.

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\*According to Speert, Hegar's sign, a selective softening of the uterus in the region of the lower segment, resulting in an increased mobility between the cervix and corpus, was described first by C. Reinl, one of Hegar's assistants, who published the observation in 1884 as a new and certain sign of pregnancy. (*Prager Medicinische Wochenschrift*—9:253, 25th June, 1884).

*Montgomery's Description of Breast Changes*

The chapter opens with an account of the series of drawings of the areola, showing the progress of the changes which it undergoes during pregnancy.

These drawings were taken from the breast of a patient with dark hair and sallow skin, and pregnant for the first time; whom I saw in consequence of a severe attack of influenza which excited a good deal of alarm, especially as menstruation had been suppressed for two periods, nine weeks having elapsed at the time of my visit, since its last appearance; but, as she was married and had some qualms of a morning, it was considered desirable to know, if we could, whether she might not be pregnant. I, therefore, examined the state of the breasts which had enlarged a little and were slightly sensitive, the circle of the areola had a faint pinkish hue, with the glandular follicles just beginning to shew themselves above the surface of the areola, which exhibited a slight degree of elevation and appeared to be a little more than an inch in diameter, but I did not measure it; the nipple also was beginning to be turgid. These appearances, conjoined with the suppression of the menses and the morning sickness, induced me to give an opinion in favour of the existence of pregnancy, which the event proved to be correct.

The series of illustrations consists of seven coloured plates, from the third to the ninth month, each bearing a separate description. That of Plate 1, drawn at the third month and reproduced here (Plate 2), reads.

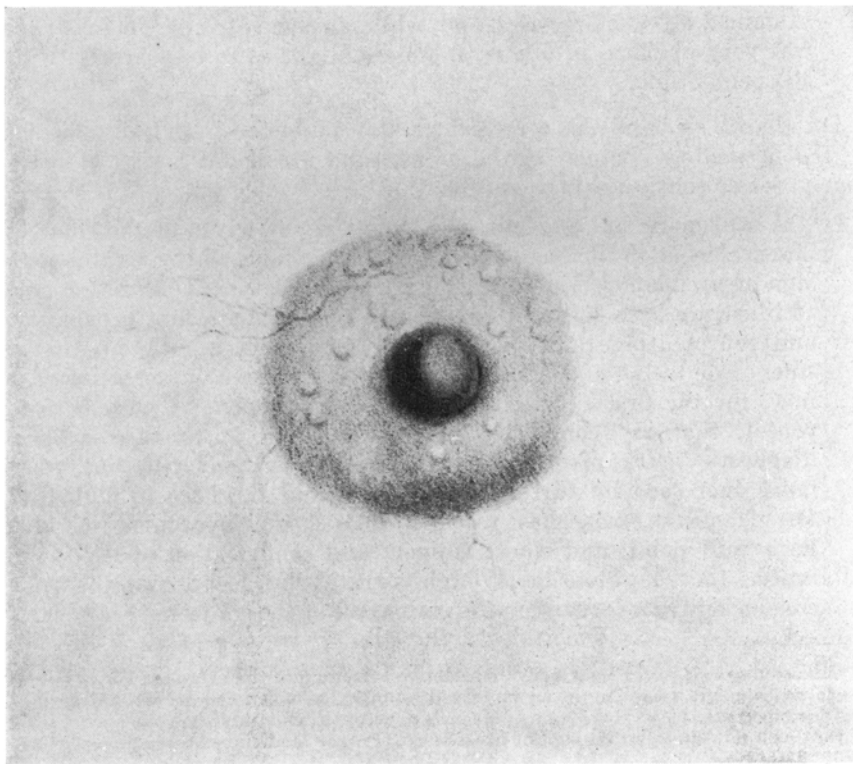


PLATE 2

Areola of the Breast in the Third month of Pregnancy

The first drawing was taken from the left breast (as were all the others except No. IV bis) just twelve weeks from the end of the last menstrual period, or eleven and a half weeks from the probable period of conception, supposing that to have happened three or four days after the catamenial discharge, which the time of delivery afterwards shewed it did. The changes in the part were now becoming very distinct, the diameter is now one inch and a half, three-eighths of an inch of which belong to the nipple, which is of a clear rose colour, while the areola itself has acquired a light shade of reddish brown, both parts were slightly turgescient, and over the surface of the disk were scattered several glandular follicles now decidedly prominent, and four, or five small venous trunks are seen indistinctly creeping towards the outer circumference and through the coloured part itself.

Plates II-VI, with their descriptions, illustrated the changes in the areola from the fourth to the eighth month respectively. The last sentence describing Plate VI reads (Plate 3):

The contrast between this and the next drawing, taken four weeks afterwards, is most particularly deserving of attention, as illustrative of a practical fact of great interest and value.

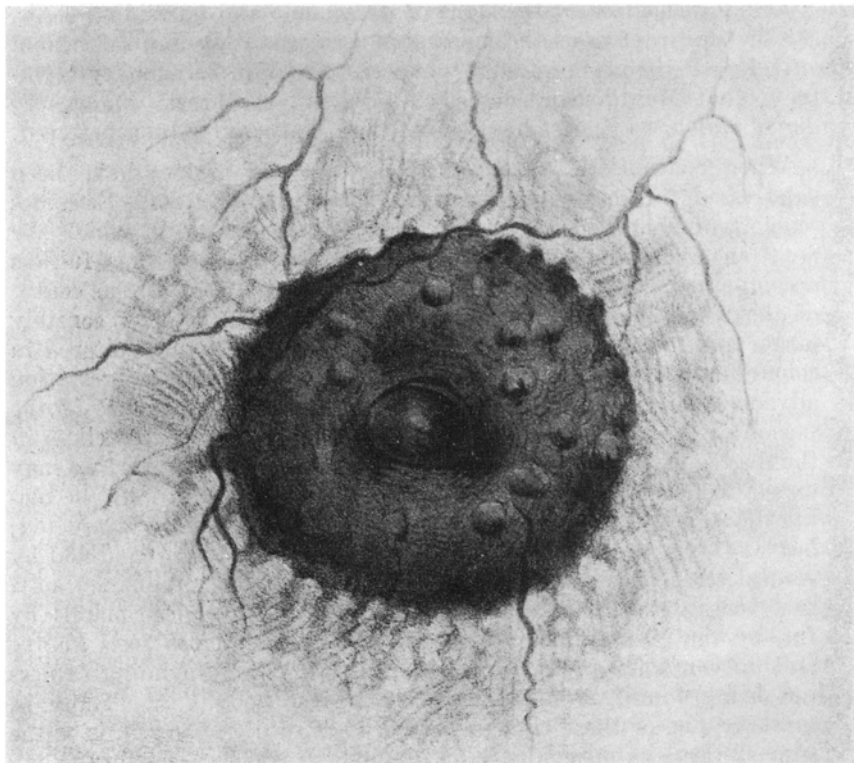


PLATE 3

Areola of the Breast in the Eighth month of Pregnancy

Plate VII, ninth month, is described as follows :

It will be immediately perceived, that the characters of the areola, instead of having become more marked, have declined, the colour has faded, the mottling is less marked. The surface has subsided and become much flatter, the breast itself paler, and the vessels less distinct; all strikingly illustrative of a remark formerly made, that if, during the progress of gestation, the ovum should happen to be blighted, or the vitality of the foetus impaired, the mammary sympathies would be found to decline, and the areola to lose its characters and fade, the truth of which is here beautifully shewn. About a month before delivery, the young woman perceived that she had got decidedly small in her person, and her size, from that time, did not increase; and when her time came, early in December, she gave birth to a child which had been evidently some time dead, and had not acquired a growth beyond that of the eighth month. The occurrence of this circumstance appears to me to add immensely to the value of this series of drawings. In making this drawing great pains were taken to exhibit the silvery lines already spoken of, and particularly described at pp. 50, 62, 296, some of which are extremely well shewn above the areola.

The first three chapters of the "Exposition" deal with some general observations on the state of the female system during pregnancy, investigation and classification of the signs of pregnancy and individual signs, such as the suppression of the menses, nausea, vomiting and salivation, respectively. It is in the fourth chapter, that on "Mammary Sympathies", that Montgomery described in detail the breast changes in pregnancy which, as Speert has reminded us, have never been bettered.

When conception has taken place, and the menses have been suppressed for one or two periods, the woman generally becomes sensible of an alteration in the state of the breasts, in which she feels an uneasy sensation of throbbing, or of stretching fulness accompanied by soreness and tingling pains felt about the centre of them and in the nipple. The breasts themselves grow sensibly larger and more firm; a circle around the nipple becomes altered in colour and structure, constituting the areola; and as gestation advances, milk is secreted. But there is considerable variety in the period of gestation at which these changes may occur, as well as in the degree of their development; . . . In general, however, we may expect to find these sympathies (except the secretion of milk) becoming developed when two months of pregnancy have been completed; but any opinion deduced from their existence must be modified by several considerations. . . . The enlargement from pregnancy may, however, in general be distinguished from that produced merely by fat, by the greater firmness of the breast, which also feels knotty and uneven when pressed by the hand, and a corresponding fulness not being found in the other parts of the body. . . . There is, however, one of those changes which, if carefully observed, is of the utmost value as an evidence of pregnancy, which, according to my experience, can alone produce it—I allude to the altered condition of the areola.

*The areola.* The alteration which takes place in that part of the breast which immediately surrounds the nipple, and is called the areola, appears to me not to have received that degree of notice which its importance merits, as being one of the most certain external indications of pregnancy, arising from the operation of sympathy. On this, however, as on many other points connected with this investigation, a very marked difference of opinion exists; for while some suppose, with Denman, that the alteration in the areola " may be produced by any cause capable of giving to the breasts a state resembling that which they are in at the time of pregnancy "; while others of equal authority maintain the opinion of Smellie and William Hunter, who regarded it as the result of pregnancy only; an opinion in which I entirely concur, and think I shall be able to shew that much of the discrepancy of opinion on this subject has arisen from want of sufficient care in observing, and accuracy in describing the essential characters of the true areola.

Most of those who have noticed this change, appear, from their observations on it, to have attended to only one of its characters, namely, its colour, which is, in my opinion, the one of all others most likely to uncertainty.

A notable exception, acknowledged by Montgomery and quoted by Speert, was Roederer (1727-1763), who had published a short statement in his *Elementa Artis Obstetriciae in Usum Praelectionum Academicarum*, Gottingen, 1753. Roederer's description of the changes in the areola, which antedated that of Montgomery by 84 years, has been translated as follows :

Enlargement of the breasts follows suppression of the menses; as a result of which the breasts increase in size, are refilled, sometimes become painful, and grow hard: their veins, blue in colour, become conspicuous again, the nipple swells, as if blown up, and its colour becomes darker; the areola, marked by a similar colour, enlarges to a greater diameter, and contains small protuberances, as if covered all over with tiny nipples. On pressure of the breast, a milky fluid flows forth.

Having acknowledged Roederer's contribution, Montgomery's description, fuller and more precise than any which preceded it, continued :

The several circumstances here enumerated at least ought in all cases to form distinct subjects of consideration, when we propose to avail ourselves of the condition of this part as an indication of the existence or absence of pregnancy. One other also, equally constant and deserving of particular notice, is a soft and moist state of the integument which appears raised and in a state of turgescence, giving one the idea that, if touched by the point of the finger, it would be found emphysematous; this state appears, however, to be caused by infiltration of the subjacent cellular tissue, which, together with its altered colour, gives us the idea of a part in which there is going forward a greater degree of vital action than is in operation around it; and we not infrequently find that

the little glandular follicles or tubercles, as they are called by Morgagni, are bedewed with a secretion sufficient to dampen and colour the woman's inner dress. These changes do not take place immediately after conception, but occur in different persons after uncertain intervals: we must therefore consider, in the first place, the period of pregnancy at which we may expect to gain any useful information from the condition of the areola. I cannot say positively what may be the earliest period at which this change can be observed, but I have recognised it fully at the end of the second month, at which time the alteration in colour is by no means the circumstance most observable, but the puffy turgescence (though as yet slight) not alone of the nipple but of the whole of the surrounding disk, and the development of the little glandular follicles are the objects to which we should principally direct our attention, the colour at this period being in general little more than a deeper shade of rose or flesh colour slightly tinged occasionally with a yellowish or light brownish hue. During the progress of the next two months the changes in the areola are perfected or nearly so, and then it presents the following characters, a circle around the nipple whose colour varies in intensity according to the particular complexion of the individual, being usually much darker in persons with black hair, dark eyes, and sallow skin, than in those of fair hair, light-coloured eyes, and delicate complexion. The extent of this circle varies in diameter from an inch to an inch and a half, and increases in most persons as pregnancy advances, as does also the depth of colour. I have seen the areola at the time of labour almost black, and upwards of three inches in diameter, in a young woman of very dark hair and complexion; while in another instance lately seen by the writer its breadth around the base of the nipple did not at any time of gestation amount to a quarter of an inch, and at first was not more than an eighth; this circle, however, narrow as it was, was studded at nearly regular intervals with the glandular tubercles, which were not unlike a ring of beads.

In the centre of the coloured circle the nipple is observed partaking of the altered colour of the part and appearing turgid and prominent, while the surface of the areola, especially that part of it which lies more immediately around the base of the nipple, is studded over and rendered unequal by the prominence of the glandular follicles, which, varying in number from twelve to twenty, project from the sixteenth to the eighth of an inch, and, lastly, the integument covering the part appears turgescient, softer, and more moist than that which surrounds it.

In a footnote Montgomery described the detail of the structure of the follicles in this way:

These follicles or tubercles of the areola, although by many considered merely as sebaceous glands, have really a much more important character, and more intimate connexion with the peculiar structure and function of the breasts, and hence might naturally be expected to display an active sympathy in any condition of the system which called into action the peculiar structure and function



of these organs, which is the secretion of milk for the support of the new being, for which purpose certain previous changes in the glands and ducts are necessary. Now it appears that these areolar tubercles are intimately connected with the lactiferous tubes, some of which can be traced into them and opening on their summit, so that in pregnant women a sero-lactescent fluid may be often distinctly perceived issuing from them, and in nurses they have been observed to pour forth drops of perfect milk . . . . In addition to this it appears, from the more recent investigations of Meckel and others, that each of these follicles is, in common with the nipple and surrounding areola, furnished with very small sebaceous glands which lie around its base, the ducts of which, from one to four in number, are found opening on the surface of the tubercle.

Montgomery then described the exceptions to these changes in the areola :

But we cannot rest here and be satisfied with the knowledge of the distinctly affirmative part of the question only, without also looking to certain circumstances which will most materially modify the certainty of our conclusions.

In the first place, then, pregnancy may exist and the areola remain deficient in at least one of its essential characters, and that, the one too generally supposed to be its most important distinctive mark—namely, the colour. The writer has seen several well-marked instances of this, two of which he formerly noticed, one in a lady of fair skin, blue eyes, and light hair; the other in a lady of fair skin, but with black hair and very dark-brown eyes; in both, the colour of the areola was so slight as hardly to differ from that of the surrounding skin, and certainly was less distinct than I have frequently seen it in the virgin, but all the other characteristic changes enumerated were well developed in both.

It has been already remarked, that in some the mammary sympathies are almost entirely wanting, or at most very feebly exerted, even though gestation should be proceeding healthily, and it should be added, that even where there should be no such deficiency in the mammary changes and areola, should the foetus be blighted, the characters of the latter will soon decline and fade away in common with the other changes previously effected in the breasts, which under such circumstances become soft and flaccid, lose their sensibility and cease to exhibit the enlarged condition of the veins; the areolar tubercles also shrink and are no longer bedewed with their sero-lactescent moisture. . . . .

If a woman has been pregnant before, and particularly if she has suckled or is nursing, it may embarrass our investigation. The colour of the areola depends on the deposition of an actual pigment between the cuticle and subjacent skin. Of this I have satisfied myself by making preparations of the part, one of which, shewing this very distinctly, is prepared in my museum. In some persons of fair complexion especially, this colouring matter is removed in some time after delivery, and the breast resumes its virgin appearance; in others the colour remains permanent, and

there is even a slight prominence of the little glands to be observed sufficient to deceive an inexperienced eye.

### *Montgomery's Life*

William Fetherston (-Haugh)\* Montgomery, the son of Leslie Montgomery, was born in 1797 and entered Trinity College, Dublin, on June 3rd, 1817. He became a pupil of the Rev. Dr. Wall, vice-Provost of the College, under whose tutorship he excelled in the study of the classics and was elected to "Scholarship" in 1820. This prize was awarded only to those whose classical attainments were of the highest order and Montgomery secured second place in the thirteen awarded in that year. Having graduated A.B. in 1822, he took the degrees of A.M. and M.B. three years later. He did not proceed to M.D. until 1852—"after he had been twenty-seven years in practice and had reached a justly deserved eminence as a practitioner and lecturer on midwifery, the department of the medical profession to which he more especially devoted his industry and talents". He became a licentiate of the King and Queen's College of Physicians in 1825, was elevated to the Fellowship of the College in 1829, and was later to serve as President in 1851 and 1852. The Royal Irish Academy elected him to Membership on April 28th, 1828.

At an early period of his professional career, Montgomery gave courses of lectures to large classes of students at his house, 38 Cuffe Street,† and it has been written of him as a lecturer that: "His style was particularly clear and pleasing, and he had a peculiar facility in communicating to his hearers the copious information he himself possessed." Because of his popularity as a lecturer, he insisted that the College of Physicians should undertake the teaching of midwifery, and make it a part of the Curriculum in the School of Physic in the University. By his exertions in this direction, the King's Professorship of Midwifery was founded on St. Luke's Day, 1827, and Montgomery had the distinction, not only of being the first holder of the chair, but also of filling it so ably over the long span of twenty-nine years. (See Appendix B.) When he resigned the Professorship on October 14th, 1856, an address was prepared and later presented to him at his house, signed by the members of the staff of the School. (See Appendix C.) Shortly before his death in 1859, the newly established Obstetrical Society of London did homage to his international reputation by electing him one of thirteen Honorary Fellows.

Montgomery's contributions to medical, and more particularly obstetrical, literature were numerous and varied. The *Cyclopaedia of Practical Medicine* printed articles on "Personal Identity", "Signs of Pregnancy and Delivery", "Rubeola", and "Succession of Inheritance-Legitimacy". Jointly with Dr. Francis Baker, he published *Observations on the Dublin Pharmacopoeia of 1826*, which for

\*In a biographical note, filed in the papers of the late Dr. T. P. C. Kirkpatrick, now stored in the library of the Royal College of Physicians of Ireland, Montgomery's second name was written as 'Fetherston-Haugh'.

†In 1834 Montgomery left Cuffe Street and moved to 18 Molesworth Street where he lived until 1843. From 1844—1848 his address was 20 Molesworth Street, after which he moved to 8 Merrion Square in 1849. The house at 38 Cuffe Street was pulled down in the summer of 1965.

many years continued to be used by the candidates for medical degrees in the University. But it is by his classical work on the *Signs and Symptoms of Pregnancy* and his observations on the spontaneous amputation of the foetal limbs in utero, both printed in the *Exposition*, that his lasting fame must mainly rest. Montgomery also collected an extensive Obstetric Museum which originally was displayed in the College of Physicians but which, in 1859, had been transferred to Queen's College, Galway.

Montgomery was never master of the Dublin Lying-in Hospital (Rotunda), because he never served as Assistant to the Master, from whose ranks each new Master is elected every seven years. It is possible that he may have held the post of Clinical Clerk, but certainly no senior appointment. This leads one to speculate about the source of all his practical experience, for it is unlikely that his knowledge and fame resulted from private practice alone. At the time there were six small maternity hospitals in Dublin, but none has survived with the exception of the Coombe Lying-in Hospital. Montgomery never held a staff appointment in the Coombe, but it is possible that he worked in one or more of the smaller hospitals (See Appendix D).

Montgomery was sixty-two years of age when he died rather suddenly although not unexpectedly. He had, for some time, suffered from excruciating pain in the chest and other symptoms of cardiac disease. Up to a few days before his death, which occurred on the morning of December 21st, 1859 at his house, 8 Merrion Square North, he had still been engaged in his professional work (See Appendix F). Montgomery was certainly Ireland's most distinguished obstetrician and, at the time of his death, Dr. Arneth of Vienna wrote that "his name is known and honoured wherever midwifery is practised".

#### APPENDIX A.

The *Lancet* (Vol. 1., London, October 14th 1837, p. 92) printed a short review of the first edition of the *Exposition*.

*An Exposition of the Signs and Symptoms of Pregnancy, the Period of Human Gestation, and the Signs of Delivery.* By W. F. Montgomery, M.D., Professor of Midwifery in the King and Queen's College of Physicians in Ireland. London, Sherwood and Co., 1837. pp. 344.

The *Medical Times and Gazette* (Vol. XIII., N.S., pp. 147-8, August 9th, 1856) reviewed the second edition of the work at length but it is only possible to extract the first and the last paragraphs.

It is not saying too much for the first edition of this work, that it was the best treatise that had ever appeared upon the subject to which it related. It was received with marked approval by the Profession both here and elsewhere; was translated, in part or in whole, into foreign languages; and at once gained for its gifted author an honourable position among the most distinguished obstetric writers.

In fine, we render our grateful thanks to the author for this second edition of his *Exposition*. By drawing so largely on his stores of practical knowledge and erudition, and bestowing so much care on the preparation of this book, he has laid the Profession under a deep obligation, and reflects honour upon a School of Midwifery even so distinguished as that of Dublin confessedly is.

The second edition was also published in Philadelphia. A review of this American publication may be read in the *Medical Times and Gazette* (Vol. XIV., N.S., p. 442, May 2nd, 1857).

## APPENDIX B.

When Montgomery was appointed King's Professor of Midwifery in the University in 1827, he was not in fact the first Professor of the subject as can be seen from the following list extracted from the *Red Calendar*, published by Hodges, Figgis & Co., Dublin, 1906-7, p. 543. There was no Professor of Midwifery in the University between the years 1785-1827.

## King's Professor of Surgery and Midwifery.

1749-1785.

Sir Nathaniel Barry, second Baronet.

President R.C.P.I. 1754, 64, and 69.

King's Professors of Midwifery in the University, appointed by the R.C.P.I.

1827—William Fetherston-Haugh Montgomery, M.D.

1856—Fleetwood Churchill, M.D.

1867—Edward Burrowes Sinclair, M.D.

1882—John Rutherford Kirkpatrick, M.D.

1889—Arthur Vernon Macan, M.D.

1909—Henry Jellett, M.D.

1910—T. Henry Wilson, M.D.

1936—O'Donel Thornley Dodwell Browne, M.A.O.

1953—Andrew Hope Davidson, M.D.

## APPENDIX C.

The *Medical Circular* (9., p. 311., 1856) wrote:

The Professors of the School of Physic in Ireland waited on Dr. Montgomery at his house in Merrion Square, on Thursday the 4th inst., (December 4th, 1856) to present him an address on his retirement from the Professorship which he had so honourably filled for the long period of thirty years.

The *Medical Times and Gazette* (Vol. XIII., N.S., p. 598, December 13th, 1856) described the event in this way:

## THE SCHOOL OF PHYSIC IN IRELAND—ADDRESS TO DR. MONTGOMERY

The following graceful tribute to the long and important services rendered by Dr. Montgomery to the School of Medicine, has been paid by his colleagues. To receive such an expression, from such men, of their sense of the remarkable ability, great industry, and steady perseverance with which he discharged his professional duties, and of their respect for his distinguished professional character must, indeed, be most gratifying to Dr. Montgomery. The address was read by Dr. Stokes as follows:

The address and Dr. Montgomery's reply are printed in full.

## APPENDIX D.

The following extract, from the *Book of the Rotunda Hospital* (Adlard & Son, London, 1913, pp. 152-4, T. P. C. Kirkpatrick), describes the many small maternity hospitals which were established in Dublin in the first half of the nineteenth century. With the exception of the Coombe Lying-in Hospital none has survived and it is possible that Montgomery may have served on the staff of one or more of them.

The second quarter of the nineteenth century was a time of great activity in medical teaching in Dublin, and numerous private medical schools were pressing severely on those of older establishment. This activity had compelled the older corporations to set their houses in order, and great efforts were made to improve the School of Physic and the School of the Royal College of Surgeons. The College of Physicians in 1827 had appointed William F. Montgomery Professor of Midwifery in the School of Physic, and his ability as a lecturer was calculated to attract many students to his classes. The private schools, however, were more important rivals of the Hospital, since their proprietors, not satisfied with providing courses

of lectures for their students, in many instances tried to afford also facilities for clinical study. As a result quite a number of small lying-in hospitals sprang up in Dublin, and although any one of them was insignificant in itself, yet combined they must have made a considerable difference to the older institution. . . .

. . . A lying-in hospital in Townsend Street was started in 1832, as an institution for the treatment of women who did not wish to go to hospital. Shortly after, a small hospital containing twenty beds was opened, but it did not do well and died from lack of support in 1836.

The South-Eastern Lying-in Hospital was opened in April, 1834, in 20 South Cumberland Street. It contained twenty-five beds and had accommodation for three intern pupils. Dr. Thomas Edward Beatty published in 1835 the first report of this institution, in which he stated that 299 women had been delivered in the year. This hospital made a special appeal to pupils of the School of Physic and of the Park Street Medical School, both of which were situated in close proximity to it. It remained open until 1852.

The Western Lying-in Hospital, opened in October, 1835, by Dr. Speedy and Dr. Fleetwood Churchill, was situated in Agar House, No. 31 Arran Quay. Churchill published elaborate reports of this hospital in 1837, 1838 and 1839, but only about one hundred patients were admitted each year, and in 1853 the place was finally closed.

The Wellesley Female Institution was another of these hospitals, which continued for some time in Mercer's Street. Henry Maunsell published several reports on the work of his institution, the first of which appeared in No. 117 of the 'Edinburgh Medical Journal'. The patients were nearly all, if not all, attended at their own homes.

The Anglesea Hospital in Peter Street was attached to the medical school of G. T. Hayden, known as the "Original School of Medicine". This hospital was closed after Hayden's death in 1857.

In 1844, Dr. Henry T. Coppin opened a lying-in hospital with sixty beds in South Great George's Street, near where the old Lying-in Hospital had stood. He made arrangements for the teaching of both intern and extern pupils, and applied to the College of Physicians for recognition of the courses in midwifery given in the hospital. This recognition, however, was not granted, and the hospital shortly after was closed.

#### APPENDIX E.

Mr. H. L. Hardy Greer, F.R.C.O.G., the well known Belfast consultant who retired recently, has supplied the following facts concerning Montgomery's descendants.

Montgomery's only daughter, named Jemima Mary, married in 1846 Samuel Little Hardy, Physician-Accoucheur to Dr. Steevens' Hospital. In 1861, the couple came to live in No. 9 Merrion Square, next door to the house in which Montgomery resided, and remained there until Hardy's death took place on October 29th, 1868.

The following descendants of that marriage are known to have practised medicine:

Montgomery's great-grandson—H. L. Hardy Greer.  
 Montgomery's great-great-grandson—A. H. McG. MacMullan.<sup>1</sup>  
 Montgomery's great-great-grandson—Ian Hardy Greer.<sup>2</sup>  
 Montgomery's great-great-great-grand-daughter—Gillian MacMullan.<sup>3</sup>

<sup>1</sup>In general practice in Shipton-on-Stour. Has recently been successfully operated on for aneurysm of the abdominal aorta—the lesion which caused the death of his great-grandfather Samuel Little Hardy, Montgomery's son-in-law.

<sup>2</sup>Consultant Surgeon to the Coleraine and Ballymoney groups of Hospitals.

<sup>3</sup>Daughter of A. H. McG. MacMullan, qualified in medicine and married to a doctor.

#### APPENDIX F.

The funeral took place from the parish Church of St. Peter in Dublin and the remains were interred in Mount Jerome Cemetery, Harold's Cross, Dublin on December 24th, 1859, where the grave may still be visited. (Grant—236). Originally, the tomb consisted of a marble slab, supported at the corners by legs of the same material, each about two feet in height. Some time ago (date unknown), the structure became unstable and the legs were removed allowing the tombstone to settle on a layer of granite slabs. Later, due to subsidence of the grave, two transverse fractures occurred in the marble and the

three fragments lay unevenly. Despite this and the fact that the lettering had been badly affected by the weather, the following inscriptions could still be deciphered:

Underneath lie the remains of Elizabeth the  
beloved wife of W. F. Montgomery M.D. who died  
May 1 1839 aged 43 years.

Here also lie the remains of W. F. Montgomery  
who died December 1859 Aged 62 years.

Also their eldest son Leslie Sidney Montgomery  
who died 12 9 1872 and his wife Jane Frances  
Montgomery who died 21 12 1879.

Arrangements were made to have the gravestones restored and the work was completed in September, 1964.