THE PROGRESS OF WOMEN'S WORK.
By S. F. A. CAULFEILD.


HAT the status of women, as members of society in general, should have been raised, and the sphere of their work considerably extended, under the auspices of a sovereign of their own sex, could scarcely be a matter of surprise. Yet the rapidity of the advance made in every direction, and the triumphs achieved, is a remarkable revelation of intellectual power, and indomitable energy and courage. Does the reader ask, "Why so ?" Because of the long-existing monopoly, by their countrymen, of all scientific, literary, artistic, and practical training of a high-class character; and of all spheres of bread-earning employment, which could possibly be available for themselves. The first effort made in this country to extend the limits of a woman's remunerative work-was that of the "Victoria Printing and Publishing Institution," inaugurated by Miss Emily Faithfull, to which our Empress-Queen ever gave her cordial patronage. A bright and very noteworthy example of "diligence in business"-even beyond her bodily powers-has been presented to us, during many years, in Her Majesty's own person; and added to this example, those of her five highly-educated, well-trained, and gifted daughters; who aid and encourage female labour and advancement, and every beneficent institution for the training and protection of their country-women.

At three-score years and ten Her Majesty acquired the language of her Indian Empire, and, so thoroughly, as to converse in it, thereby to bring herself into closer touch and sympathy with her Eastern subjects. Moreover, so carefully had she studied the history, habits, and sentiments of those dusky races, and the commerce and geography of the land, its boundary lines, its forts, and strongholds, and its divers races and their respective interests, that, when a deputy of the Indian Government came over, some few years ago, to lay certain facts before her, he declared that his Imperial Mistress knew considerably more than he knew himself, or had come over to tell her! Of the scores upon scores of documents of every description to which her signature is required, not one of them receives it until she has thoroughly perused and considered the questions involved. And in addition to this, she has audiences to give to her ministers, and deputations to receive; her own private affairs to manage, and the personal claims of an immense family connection to meet; and over and above all this we must add her daily study of the politics of her own, and of all other nationalities, the course of events leading up to friendly alliances, or to impending collisions, knowing that, on her own woman's shoulders, she owns the prerogative, and must bear the responsibility, of declaring or prohibiting war.
But enough has been said, in view of my limited space, of the venerable and illustrious lady, whose example I exhort you to emulate. I do not mean to take a retrospect of the "women's movement" in the course of the last fifty years, but restrict my theme to noteworthy events, embraced in the circle of the last two or three years, in all parts of the world. I must also make a note of the societies which have, at last, had the magnanimity
to remove the disabilities of the sex ; and have admitted them to membership and equal privileges with their brethren. Amongst the old clubs, or orders of the (so called) "workingclasses," that of the "Foresters," the "Friendly," and the "Oddfellows" have extended the privilege of admission to women. I do not know whether this act of reformation in the lower grades of the community were prior, or subsequent, to the accordance of equal privileges to women by the "Salvation Army," but imagine that they have "followed suit." The institution of university education, the granting of degrees and diplomas, and the opening-up of professional spheres of work for women, at first a gradual and somewhat slow process, and then, as it were, with a rush, must be well known to all classes of my readers.
The legalisation of their practice of the " healing art" has been but a restoration of an ancient privilege, and that in other lands besides our own. An instance of the divine blessing on their rectitude and fearless selfexposure to danger, in the exercise of one branch of the profession of which, at that time, they enjoyed the undisputed monopoly, is given in Exodus i. 20, 21. In 1892 there were one hundred and forty medical women in the United Kingdom, and the British Medical Association has recently expunged one of its rules, that excluded women from membership of the Association; and I may also observe that amongst the latest concessions made in this department of professional work, is the step taken by the University of St. Andrew's this spring. By an ordinance recently enacted, lecturers have been specially appointed for the instruction of women in medicine. A sum of 630,000 becomes available this present year (1893) for bursaries or scholarships, "one-half of which is reserved for women students exclusively." Moreover, "the women who intend to enter the medical profession will have a prior claim to these bursaries." But they may graduate in arts, sciences, and theology. During a course of seven years past, medical education has been granted to women in the Edinburgh School, and access to the licences of the Conjoint Scottish Colleges of Physicians and Surgeons; but the University degree has been withheld from them. Now the barrier of old prejudice has been broken down, and existing evidences of a woman's absolute capability for the theoretical acquirement and practical exercise of any intellectual profession she may adopt, have been recognised, and our medical students may now matriculate as its undergraduates, and obtain its medical degrees.

It was in 1882 that these degrees were first granted to women in the London University, and of those who have taken it-now upwards of thirty-four of them have won the gold medals of the University, viz., the distinguished and much-lamented Miss Prideaux, and Miss Piercy in anatomy and in the Materia Medica; and Dr. Mary Scharlieb and Miss Pace in obstetrics. These were taken successfully in the years 1881-82 and 1890-91, and in 1890 Miss Alice McLaren passed in first class honours. Twenty-seven or more of our medical institutions for women and children are officered partially, and in most cases wholly, by registered medical women, including the post office appointments held by them (for the female staff), the Homerton and Stamford Hill fever hospitals, the Edinburgh school board, and two lunatic asylums. Many more appointments are held by medical women in India likewise. An article by Dr. Garret-Anderson,
president of the London School of Medicine for Women, recently appeared in the Fortnightly Review, called "The History of a Movement," in which those interested in this department of women's work may make themselves acquainted with the rise and progress made by women-doctors, and the advantages now secured to them.

America took, I believe, the lead in this direction. At the present time, lady physicians are distinguishing themselves in that continent by their thorough efficiency, and those in Philadelphia are specially credited with making large fortunes, or, at least, incomes, some of these averaging from 10,000 to 20,000 dollars per annum. In Russia, women appreciate the ministrations and advice of duly qualified practitioners of their own sex. The first who took the degree of Doctor of Medicine in that country was Madame Susslow, who has been in full practice for five-and-twenty years, enjoying a great reputation as a specialist for the diseases of her own sex. She was the daughter of a small farmer, educated in Moscow, and, showing a strong desire for medical studies from an early age, was sent to Switzerland to pursue them. These she rapidly completed, and took her M.D. degree, returning to her native land to follow her important vocation. I may here note the fact that a new opening for women in a lower branch of the art, but which, on account of the necessary practical co-operation of men in certain cases, I do not myself approve, viz., the profession of veterinary surgeon, has been adopted by one lady (and it may be more) in Russia. Mdlle. Dobrowilska is the first lady to whom the necessary diploma has been awarded in that country.
In Germany the movement is making fair progress. The Prussian Minister of Education has been receiving petitions requesting that women may be allowed to enter the universities, and attend the state examinations, and ladies who have graduated in high schools are already permitted to attend certain lectures as Hospitanten, in Berlin and Leipsic. The society just inaugurated for the "Reforming of the Education of Women," has opened (or will shortly do so) a private school at Weimar, where girls will be thoroughly prepared for matriculation, and entrance into the German universities. These latter are still closed to them, but the strain on limited fortunes, under the pressure of increased taxation, will carry some weight in the counsels of the stolid German Fatherhood, and the old and widely prevailing idea, that a woman should be recognised only as a hausfrau, will give way to the now universal awakening to the fact, that "all sorts and conditions of men" should be selfsupporting, if need be, and if within the range of personal capability. I cannot enter fully into the struggles, defeats, and successes connected with the "Woman's Movement," even in our own country, and can give but a sketch of a still slighter character of recent rebuffs or triumphs it has met in foreign lands. In France there is little chivalrous feeling in behalf of women, albeit, that it was, par excellence, the home and centre of the ancient chivalry of Europe. But the rising generation is growing up under very different auspices, and the autocrats of the schools, and the government bureaux, are not the representatives of the ancient noblesse ; and thus it is little matter of surprise that the male students of Paris have shown themselves bitter opponents to the admission of women to the lectures which they themselves have hitherto monopolised. It seems that on the occasion of one
of the Sorbonne lectures (on "French Romantic Literature "), which, being of a description that permitted the opening of the doors to the general public, was attended by some ladies, the young men students endeavoured to interrupt M. Larroumet, the lecturer, and failing to do so, shouted, "No women," till both he and his lady audience had to leave the room. Comment would be superfluous. But the progress of would-be women-breadearners is, nevertheless, already making headway in France. Amongst other questions connected with them, that of their licence to acquire and practice the vocation of druggist is under discussion, or was so very recently. There is a society for " the Amelioration of the Position of Women," which has decided to grant a sort of scholarship annually, to enable girls of slender means to go up for the examination that must be passed in order to qualify for dispensers of medicines. Here in London we have three institutions for the training of women in this connection, i.e., the "Pharmaceutical Society," "South London School of Pharmacy,", and the "Middlesex College of Chemistry," and in Dublin there is the "Pharmaceutical Society of Ireland."

Dentistry is being successfully practised in England as well as in other countries. In the Edinburgh Dental Hospital, women are trained as practitioners, and we have a "Ladies" Dental Institution" in theold Brompton Road. In Denmark, women are practising dentistry in several instances, after due qualification, having passed the regular examinations instituted for that profession.

I have already alluded to the institution of colleges for our sex, with a list of which it is not necessary that I should occupy space, although I cannot refrain from naming a few of the most brilliant amongst the students. It may be that some of our girls had an opportunity of reading an article by Canon Browne, in the Nineteenth Century, in which the institution of an "Imperial University for Women" was suggested. The curriculum in this seat of learning would be specially adapted to the requirements of the sex, so as to open a career to them "comparable in honour, and emolument with that open to men." So far they have not been permitted to qualify for degrees at Cambridge or Oxford, and thus a special university for themselves is decidedly called for. Canon Browne's idea is that there should be a central council, i.e. a senate with degrees, fellowships, and all else essential to a perfect organisation, women holding degrees themselves having a share in its administration.

We have certainly shown ourselves deserving
of every educational advantage for which we have struggled, and won by indomitable energy and perseverance; for though not all endowed with the splendid abilities of some of our distinguished sisters, the percentage of women who pass examinations successfully for Government positions in the various kingdoms (or republics) of the world, is found to be greater than that of men. A certain doctor has given it as his opinion that great study was more injurious to women than to men. But as it happens, those of the first-named sex who have achieved the most brilliant of successes, are healthy young women, in no degree injured by their brain work; nor unsexed in reference to those duties of private life, which tend to render home a retreat of rest and happiness. Indeed, it is a remarkable fact that our distinguished women who have, in some instances, invaded the hitherto monopolised "huntinggrounds" of their brothers, outside its precincts, are women equally exemplary as wives and mothers, and "guides of the house." As a rule the size of a female head is smaller than that of a man, and from this fact it has been argued that they lack the cerebral capacity and powers of mind of their brothers.

But, arguing from analogy, this statement does not hold good, in the face of the fact that some of the most insignificant of the creation by far excel in brain-power the vastly larger animals, in an instinct almost equal in reasoning ability to human intelligence. The ant, for example, is specially pointed out to us in Holy Writ as an example from which we may learn wisdom, and yet in point of size and weight, the brain substance of this tiny creature may be compared to a mote in a sunbeam!

It is the quality, rather than the quantity which, as a rule, should decide the question of intellectual ability. A woman is generally a smaller animal than a man, and her braintissue is in due proportion to her entire size. The average weight of a man's brain is said to be forty-nine and a half ounces, and a woman's forty-four ounces, the latter having a higher specific gravity. The man's brain is larger in proportion to his own stature, but the woman's in proportion to her weight.

To return to the remarkable fact that some of our best scientific and classical students are healthy, vigorous young women, I may specify Miss Edith Read, who took a "double first" in two of the stiffest tripos at Cambridgemathematics, and moral science.
"Look in my face and see."
The wranglership was not gained by a bespectacled, old, wizen-faced, "blue-stocking,"
of the approved and once distinctively typical race. She made a most promising beginning, for at the age of eighteen she matriculated at the London University with first-class honours. At the Girton entrance examination she obtained two scholarships, and at the close of her course she came out with a place equal to that of twenty-sixth wrangler. She now holds the appointment of assistant-clerk to the "Parliamentary Commission on Labour," and I may add seven or more women are engaged in the same work who were students of Oxford and Cambridge. And in the brief list which I cannot but give my readers of some of our most remarkable female scholars, the name of Miss Black should be recorded, for she was said to have " walked over the course where no man then dared to compete." She appeared in the first-classmedirval and modernlanguagestripos. Miss Scott may, perhaps, have a claim to be placed the first on my list as being one of the earliest of our distinguished collegians who was bracketed with the eighth wrangler. Miss Ramsay-now Mrs. Butler-and Miss Hervey come next on my catalogue, the former having distinguished herself in the classical tripos, and the latter in the modern languages tripos, Miss Ramsay winning firstclass honours, and attaining to the position of senior classic of the year. Her stady of Greek only commenced the year before she entered Cambridge; and four years subsequently she ranked amongst the first classical scholars, and beat them on their own ground. As the result of this indisputable evidence of the brainpower of which a woman's smaller head may be capable, another distinction was awarded her, for a letter of Her Majesty's congratulation was sent her by Sir Henry Ponsonby by command of the Queen, accompanied by an engraved portrait of berself. The last of our students to whom I can award a space in this collection of brilliant women is Miss Fawcett. Her first achievement was to gain the Gilchrist Scholarship at University College, and thence she entered Newnham, where in due time, and after study never exceeding six hours a day, she came out on the lists "above the senior wrangler." Some very noteworthy facts in reference to this remarkable girl are, that she took her meals with extreme regularity, and went to bed early, had keen enjoyment in fencing, tennis, and hockey, and that she is a proficient in the essentially feminine arts of embroidery and dressmaking. My next part in this series will deal with our representative women in the several departments of astronomy, archæology, music, entomology, etc.

## (To be continued.)

## MERMAIDENS.

By SARAH TYTLER, Author of "A Young Oxford Maid," etc.

## CHAPTER V.

THE air of the cockpit was hot and stifling, and felt as if it must be full of the great clouds of smoke which we knew were darkening the blue May sky, and serving to conceal one ship from another. We clustered together like crows in a mist, which the dimly-burning lanterns did not do much to illumine, when we heard a loud crash in the near distance. We could not tell whether it was a mast which had fallen, or whether the side of the Sea Serpent had been pierced by a shot. Aunt Maria and Sally could not repress a simultaneous scream and clung to each other. It
was not our little Jane who blenched; we lived to learn that she was a very heroine in the midst of her weakness, and I suppose I was too ignorant to understand the damage which might have been done.

Presently we were told that it was only part of the bowsprit, with its sails and rigging, which had been shattered and torn, and was, no doubt, hanging: disconsolately and disreputably down in front of us; but no very serious injury was inflicted, and we were comforted by the tidings.

The first time heavy steps came stumbling down the companion-ladder,
and the drooping figure of a sailor, carried, like a bundle of clothes, by two of his messmates and followed by the surgeon, was seen by us as it was taken to the other end of the cockpit, we caught our breath, held each other's hands tightly, and said in an awe-struck whisper, "Oh, poor, poor fellow! Who can it be? Not anybody we know particularly, let us hope!'"

But surgical treatment and nursing were a mystery and a horror to women of that day. Aunt Maria and Sally were, the one a sailor's sister and the other a sailor's daughter. They were humane women; neither of them was a


PART II.
MY first part of this series concluded with notices of women-students, who, profiting by the advantages of a university education, rose to the highest summit of honour attainable by their male fellow-competitors. I may add to the three or four distinguished names therein recorded, those of two more women-wranglers who have this year vied in their intellectual struggles with their brethren, and won their laurels. But the justice and magnanimity whic'? would show "honour to whom honour is due," and pay that which has been undoubtedly earned, is not always found equal to the occasion when it involves the granting of a degree. In ancient classical times, women who distinguished themselves in the schools of learning-and they were not a few-were acknowledged as successful aspirants to the highest honours that were attainable. Now St. Andrew's, and the London Universities, and those of Chicago, Pennsylvania, Brown and Tufts, and Yale, stand by themselves in their fair-dealing with women scholars, admitting them to all their privileges and honours. Several professors and other officers of Chicago University are women, one-third of the six hundred students enrolled being of their sex.

But the strange tenacity with which the rewards of intellectual merit are monopolised by our brethren in our own and other schools of art and of learning is evidenced, even in the face of former precedent, in the Royal Academy, where Mary Moser and Angelica Kauffiman were elected Academicians in days gone by ; and only the other day the Royal Geographical Society refused the admission
of women as Fellows, when at least Isabella Bird (Mrs Bishop) and Mrs. French Sheldon might certainly have been regarded as well qualified for such an honorary distinction, and both ladies very worthy successors of the wonderful Ida Pfeiffer. The travels of Mrs. French Sheldon through the great Dark Continent were undertaken not for the mere gratification of a strong natural impulse, but with the noble desire to demonstrate a fact in the interests of humanity, i.e., to prove that the explorations undertaken for the benefit of commerce and civilisation need not to be carried out with sword and musket, and the shedding of human blood. And this was exemplified in her own frail, unprotected woman's person! A noble act of selfdevotion and heroic courage resulting in perfect success.
I have alluded to the claims of our female painters to Academical honours, but have made no personal mention of any. My reason is to be attributed to the fact that there are so many of them, as, for example, Mrs. Butler, Mrs. Jopling, Miss Florence Hannam, Mrs. Earnshaw, and Miss Merrick, who has painted the portraits of five reigning sovereigns, Mrs. Anderson, and a goodly company of others, all deserving well of their own English Academy. Women sculptors, also, have a claim to distinctions of merit, and amongst them the Princess Louise of Lorne. Our sex is also represented in that admirable sculptor, Miss Hosmer (U.S.A.), and our goodly crowd of representative female artists in Rosa Bonheur. How hardly she obtained the wellearned distinction of Chevaliere of the Legion of Honour may not be generally known, and was due, not to the sense of justice of those who have the power of awarding such a distinction, but to a female sovereign who chose to exercise her supreme prerogative and presented the order to her. During the reign of the Emperor Louis Napoleon, the Empress requested the authorities to bestow the order on this, her talented subject, and was refused. Her first act on becoming Regent was to visit Mademoiselle Bonheur, and taking the badge of distinction with her she pinned it on the artist's breast, embracing her, and declaring her a Chevalière of the order. She then communicated to the authorities that she had, by sovereign right as Empress-Regent, created a precedent in favour of her sex. Since then the distinction has been awarded to some few remarkable women for heroic courage, and valuable service on the battle-field.

But here I must return to the subject from which I have wandered, just to say that already this year ten women have passed the

Cambridge Nathematical Tripos, and two attained the rank of Wranglers.

Agreeably to my promise in the first part of this series, I must now bring some of our astronomers to the notice of my readers. I have the pleasure of personal acquaintance with Miss Agnes Clerke, who has recently been awarded $£_{\mathrm{o}} \mathrm{IOO}$, the Actonian Prize, for her valuable work on astronomy, now in its third edition, and her Lives of Astronomers is a book well worthy of notice. She has studied the distance of the Pleiades, and she has calculated that their light, travelling through space to our planet, takes two hundred and fifty years to reach us. It may interest some to know or be reminded that light travels at about the rate of one hundred and ninety thousand miles in a second. Another most gifted woman and distinguished astronomer is a Scotchwoman, a native of Dundee, who, to our loss, has established herself and her work at Harvard University. I refer to Mrs. Mina Fleming, who has inaugurated a corps of a dozen women as trained assistants to aid her in solving difficult problems, and with undisputed success at that observatory, examining photographs, and making computations and reductions of astronomical work. Mrs. Fleming has examined and measured the twenty-seven thousand spectra of stars involved in the Draper catalogue (the late Dr. Henry Draper), and she has, moreover, herself discovered twenty-one new and variable stars (a larger number than as yet discovered by any man) by careful examination of the photographs taken at both the Cambridge (U.S.A.) and the Peruvian stations of the Harvard Observatory. In fact, it is not too much to say that some of the most remarkable astronomical discoveries made in the past few years have been made by this gifted woman. In her the wonderful Caroline Herschell has undoubtedly a worthy successor.
It has been a matter of some surprise that, remarkable as our sex has been, as exponents of the science of music, both as singers and instrumentalists ; they have produced no work of importance, very beautiful song-composers as they have, in many instances, shown themselves. I have always myself maintained the opinion that a grievous lack of training, and of due opportunities for developing inherent, yet dormant musical talent has been the, hitherto, insuperable barrier to their rising beyond the rank of song-writers. But the awakening has begun; and this, after but a very few years of the training, essential to such a development. Miss Ellicott, the daughter of the Bishop of Bristol and Gloucester, was the first of the students of music who produced a higher and more important order of composition, and has shown very considerable genius and originality; and now we may add another name, that of Miss Ethel Smythe, whose "Solemn Mass " in D was produced under the auspices of the "Royal Choral Society" a short time ago, during the present season, at the Albert Hall, and obtained the approval of Her Majesty the Queen. It was declared by the critics to be "a work of undoubted ability," and remarkable as being only her second attempt at writing for the orchestra. The first was a cleverly-scored serenade produced by Mr . Manns a couple of years ago, and pronounced as "stamped with the virility, the boldness and the decision of a masculine hand" (the highest praise a man would give). As yet we have only one "doctor of music" of our own sex, the first who has been admitted to that title of distinction, with the exception of H.R.H. the Princess of Wales. I refer to Miss Annie Wilson Patterson, Mus. Doc., director of the Dublin Choral Union, and herself a
composer of merit. Of singers and instrumentalists so many are distinguished, and so very well-known amongst all classes of my readers, that it would occupy too much of my space, and without due reason, to give any individual notice of them. I may, however, note the pleasing fact that a woman has gained, and for the first time, the Bonamy Dobrée prize for violoncello playing at the Royal Academy of Music. The lady thus honoured is Miss Gertrude M. E. Hall, the daughter of a gentleman residing at Brighton.

I regret to say that one, at least, of our most distinguished archæologists was removed from the sphere of her interesting researches and labours in April last year. Not only as an archæologist of a very high order was Miss Amelia Edwards distinguished, but as a writer, a musician, an artist, and a lecturer. It was she who founded, with the aid of Sir Erasmus Wilson, the Egyptian Exploration Fund, of which she was the Hon. Sec. She was also a member of various Oriental congresses, VicePresident of the National Society for Women's Suffrage, West of England branch, and a member of the Biblical Archæological Society, and of the Society for the promotion of Hellenic Studies. Only a few months before her death a civil list pension was awarded to her; and besides this recognition of her services in her own country, she had an honorary degree conferred upon her in the United States of America on the occasion of the celebrations of Columbia College. We may also cite the example of another distinguished contemporary archæologist, the Countess Ersilia Lovalelli, whose fame is said to be world-wide.

Another representative woman is Miss Ormerod, the entomologist for many years of the Royal Agricultural Society. She also held the appointment of consulting entomologist of that society, and of special lecturer on economic entomology at the Royal Agricultural College, Cirencester. How valuable her services have been, I think it would be needless to say.

This brief allusion to the field of her researches turns my thoughts very naturally from the theme of individual public work to the collective outcomes of women's intelligence and industr* I refer to the Agricultural College at Swaney, Kent, whence women are turned out fully qualified to carry out, in an active professional life, what they have acquired during their training, which is both theoretical and practical. There is a ladies' branch of the Home Produce Company, dairy work, stockkeeping, and vegetable growing, being all comprised in the course of the training. There is also a Women's Gardening Association.

Market-gardening is now being very successfully carried out by women as well as landscape gardening; fruit-growing, and jam-making, and rose-farming, are all now in their hands. Miss Wilkinson, the landscape gardener, who has laid out the open spaces in London so well, considers that there is a great field for successful enterprise in horticulture. To attain efficiency in their vocation, women apply themselves to the study, not only of botany, but zoology, natural philosophy, improvements of soils, rotation of crops, management of glasshouses, practical chemistry, etc. Dairy-keeping is another department of a kindred nature which is being studied, together with poultry keeping, and the management of apiaries, in a scientific manner, carried on in Somerset and Gloucestershire, as well as in other counties under admirable institutions. Amongst the lady-managers of the Columbian Exhibition there is a very remarkable representative woman engaged in this department of work. She is the lady-manager of the Board for Indiana, and vice-chairman of the executive com-mittee-i.e., Mrs. Virginia Meredith, of Oakland Farm, Indiana. Her article on "The Privileges and Possibilities of Farm-life" was published in the leading papers of her own country, and re-published in England and Australia with commendation, and her pen has been regarded as an authority on live stock. A monograph of the live stock of her own state is one of the exhibits of the World's Fair. She acted as her husband's secretary and manager in the first instance, and then, as a widow, took the whole business into her own hands. Having received a collegiate education, and then studied the science of agriculture, and the rearing of herbs, she has proved eminently successful, and has lost nothing of those feminine attributes and characteristics which form the special charm of a woman in the eyes of the so-called stronger sex. Having no child of her own she has adopted those of a friend now no more, being devoted to children.
From the cultivation of what grows or exists above ground, under a woman's auspices, I will give an example of what she can do, and with as triumphant success as her male competitors underground. The idea is somewhat more novel when adopted into the ever-growing catalogue of work performed by women. Another lady-manager of the women's department at the World's Fair is Mrs. Clara McAdow, the mining millionaire. So far, I fancy ber vocation in life's struggle for bread -and butter withal to improve it-is unique in the story of new occupations for the sex ; but special opportunities may render it expedient in others to emulate this lady's astonish-
ing enterprise and perseverance. Within the last eight years Mrs. McAdow has risen to the summit of her hopes and ambition, having accomplished what most people take a lifetime to do-made her fortune. She was recently appointed a delegate to the Mining Congress, the first of her sex to be accorded the distinction, and she was named to serve on the jury of awards in Mines and Minings at the Chicago Exhibition. Eight years ago this remarkable woman was in possession of four mines as yet undeveloped, only a sixty-foot hole in the ground preparing the way for her operations. She constructed new roads and bridges, she herself acting as her own engineer, over which she had machinery and building materials transported; she erected houses and crushing mills for the ore, and had the mining carried out under her personal direction. The "Spotted Horse Mine" (Fergus county) quickly developed into a grand institution in the best possible working order, she herself running it unaided. And this entailed the necessity for her riding some 120 miles or more over a rough and even dangerous country twice a year to Chicago and St. Paul for supplies. The mine is now 400 feet deep, has IOO-foot levels provided with hoisting works, is timbered and car-tracked; has a twenty-stamp mill with twelve pans, and is lighted by electricity by a private plant. This remarkable woman now lives at Detroit in her well-earned palatial winter house, is an art critic and lover of literature, and is surrounded with objects of vertu, and is by no means " unsexed" by the days of struggle, and fatigue, and association in her labours with working men.

It is only within the last few years that women have been trained as lecturers on every variety of subject-scientific and literary and domestic economy. The National Health Society, of which Miss Lankester is the Hon. Sec., holds classes and prepares women for this profession. Sanitation, elementary anatomy, domestic and personal hygiene, physiology, and nursing in accident and disease ; all these are included in the subject-matter of the lectures which duly qualified women are sent into the provinces to deliver to the country folks. There is also an association of women pioneer lecturers likewise formed for sending qualified persons into the country to lecture on science, art, history, literature in general. Local centres may be instituted to this end, and those desiring to engage the services of a lecturer, can obtain all necessary particulars from the Sec., Miss Bradley, 13, Gray's Inn Square, W.C. I should add that this useful association is in no way connected with the Pioneer Club.

## IN THE HOUSEPLACE.

or needle, which you will turn to with increased enjoyment by-and-by.

Take them up, too, as tools belonging to a profession, and see that they are kept in "professional" condition. If it is "a bad workman that quarrels with his tools," it is the good workman that keeps them rightly. The brushes that are used upstairs and downstairs alike will soon take the pile off the drawingroom carpet; and the floor-cloth, which has been used where grease has been dropped, is spoilt for its own proper work. Another wrinkle lies enfolded here. "Bridget" used to forget to shake out her window-leather after washing it, consequently it was hard and soon unfit for use, and a new one was needed; ours has been hung up on its own particular hook, and so is very little the worse for wear, and we may say the same of our floor-cloths, dusters, and towels, quite a pleasure to handle them again. What was it that someone said? "If we are to do Bridget's work and
do it well, what time shall we have for other things, and if we have no time for them, what use was it to spend money and labour in acquiring them ?" By other things, I suppose you mean music, drawing, reading or study. Now listen; this is precisely where your ladyhood, your brains, and your accomplishments come in. Because you have been trained and disciplined, you can understand that those only have "time" for everything who " make" time. Bridget felt bound to make some show of being occupied lest, finding her with idle hands, you should have been tempted to give her something more to do. We know better. This caring for the " meat that perisheth," though highly necessary and important, is not the only aim of our existence ; we can do that, and we can do something more. By doing every task at its own proper time, doing it so well that it will not need to be done over again, wasting no moments, but buying up every minute as we go along, it becomes

You see, being ladies, we have the desire to please the eye as well as the palate of those we cater for. It is more trouble though, do you say? Well, a little perhaps, but it is worth it, don't you think ?

While I think of it I must remember to tell you that the ontside of that brioche (after it has been moulded into a round bun and set on a baking tin) will require to be brushed over with a little melted butter and lightly sifted over with castor sugar to give it the rich brown glaze which is always seen on the genuine article. We shall split it open when baked, butter each half, cut it in squares and eat while hot.

Now we have finished the pastry the fire can be allowed to go down, only keeping it in
by a shovelful of wet cinders and small coal. About four o'clock I shall come in and rake it clear, build it up with cobbles, and when the oven has become thoroughly hot, take the bread up, knead the dough very lightly into shapes and put my bread in.

If cooked too slowly bread is apt to be puffy and sour, if too quickly it is crusty outside and pasty within. Like everything else it wants watching and care.

Now let us clear up. Take care to wash that pastry brush well in warm water.

We have done a good stroke of work this morning, I consider. As we are having yesterday's broth rewarmed, and the remainder of the joint served cold, we will prepare a tomato salad by-and-by.

They only require to be thinly sliced, then dressed with salt and pepper and vinegar, and a little oil ; but I think a few shreds of onion give just the necessary sharpness to tomatoes which they generally lack. Lay one or two lettuce hearts with them at the last.
I did not tell you, but I washed the potatoes and put them at the bottom of the oven to be roasting while we were doing other things, so economising time as well as fuel, you see. And I always do think roasted potatoes go well with cold meat, don't you?

Now then, girls, away with you! You have time for a good game or a run before dinner; afterwards I shall want your help in cuttingout for the Clothing Club.

Lucy H. Yates.

## THE PROGRESS OF WOMEN'S WORK.

PART III.
You all are probably aware that women took a larger part in affairs at one epoch of English history-not those taken from the illiterate ranks of the community, but persons of the highest culture and most extensive influence. Outside the Houses of Parliament there were also those holding manorial rights, such as are not now exercised in all respects by the existing lady of the manor, some of whose rights and authority are held in abeyance, and will, probably, be never restored. The manors were originally called "baronies," and still entitled "lordships," and each lord or lady was empowered to hold a court, called the " court-baron," for dealing with cases of misdemeanour, and for settling questions of dispute between their tenants. You must not picture to yourself the incongruous presence of these " honourable women" (first abovenamed) in a bear-garden of roughs, but in an august assembly, where all honour and courtesy was shown them when taken into council. I name these historical facts, quite apart from the expression of any opinion on my part. On one occasion, we read that the special privilege of acting as a judge was granted by Henry VIII. to Mistress Anne Berkeley, of Yale, Gloucestershire, who appealed to him to punish some men who had broken into her park, killed deer, and fired her hayricks. But in response to her request, the king placed all authority for so doing into her own hands, and granted her a special commission to try them. Upon this she acted, empanneled a jury, heard the charge, and pronounced the sentence. In the present day we find that a woman, Mrs. Bartlett, has late', been elected justice oi the peace; and, in balloting for the election of a United States senator, in the legislature of that state, votes were being given in her favour, but I am unable to say whether with ultimate success. Here, we have for some few years held appointments as Poor Law Guardians. A precedent has also been established in reference to the office of churchwarden, in the case of the Dowager Marchioness of Londonderry, who has been re-appointed to that office for Machynlleth.

As regards the franchise, New Zealand has recently taken the lead amongst the various parts of the British Empire, and has accorded it to women, who have taken advantage of it, and already recorded their votes.

Miss Collett, M.A., of the London University, and who gained the Political Economy Scholarship, was recently appointed WomanLabour Correspondent in the bureau of that department.

At the present date there are two ladies practising as conveyancers in London, i.e., Miss Orme, who likewise does special work on the Labour Commission, and Miss R. E. Lawrence, who has just proved a successful candidate for the London LL.B. degree. In France, a lady has recently been called to the Bar, and another is practising as a barrister at Montana, U.S.A., and now seeking the appointment of attorney-general. These cases were mentioned by Mr. G. R. Dod, at a provincial meeting of the Law Society. In America there are more and exceedingly remarkable instances of great talent and efficiency exhibited by practising barristers and pleaders of our sex in those transatlantic States. In the Kansas towns, where women are police judges, the methods adopted are sometimes very original, and, apparently, equally successful. A sentence is very commonly to the effect that the tramp should have two baths daily for a week or ten days, and hard labour on a pile of stones (to be broken for roads), with the order that he was to be fed if he worked, and starved if he refused, thus carrying out the Divine decree, "If a man will not work, neither shall he eat." The relief from their depredations and other misdemeanours has been marked, in view of all the baths that the lady-judges prescribe! In the State of Arkansas a woman has been elected assistant sergeant-at-arms.

A Health Committee formed of ladies has, I understand, been formed in several English towns and cities, who make house-to-house visitations, armed with soap and carbolic powder. These visitors make suggestions as to cleanliness, report on overcrowding, on discovery of infectious diseases, and on the general condition of affairs to the health authorities. An organisation of this kind has existed for the last ten years in New York, and one has just been instituted in Philadelphia.

A woman sanitary engineer was appointed to represent English women at the American Congress of Hygiene. She is the possessor of certificates for art, music, hygiene, divinity, physiology, and sanitary science. This lady does not play at her profession, nor spare herself in the most disagreeable and trying departments connected with it, for she visits slaughter-houses as well as workshops and dairies, end she understands the laying of drains nd water-mains, connections, and so forth. In fact, she is thorough in all she undertakes.
Not only have we stepped into the field of sanitary engineering, but likewise into electric
engineering, and that in the person of a thoroughly feminine representative woman, Miss Millicent Fawcett, of whose carcer and triumphs at Cambridge I have already spoken.

This branch of useful work has also been taken up in America, and with equal demonstration of efficiency. Miss Bertha Lamme of Springfield, Mass., has obtained the diploma of electrical engineer from the State of Ohio, and she has been engaged (some little time since) by the Westinghouse Electric Co., one of the greatest corporations in that line of the United States.
Architecture is selected as a new opening for women, and for those who have artistic taste and are good draughtswomen, it seems a very suitable profession. A well-known firm in London has recently arranged to take female pupils. Some will be failures, no doubt ; but how many young men adopt professions and prove failures in every sort and kind of work ?
As yet we have no women governors of jails; but for some few years past they have proved highly efficient in more than one great prison for women in the United States. They have the whole direction of them, and carry out their own special theories with very remarkable success. Their main idea is to coerce, punish, and train the wrong-doers with a view to ultimate complete reformation, to raise or bring into existence their self-respect, so utterly lost if ever possessed ; to cultivate also habits of neatness and cleanliness, to make them feel that they may still be trusted and raised to the level of useful and respectable citizens. So their surroundings are bright and attractive, their dress is plain, but neat and even pretty. They have the enjoyment of a garden, and the cultivation of flowers; in fact, the best side of the faulty character is brought out and the highest feelings worked upon, and this, with such great and gratifying results that it were well if this talent for reforming the wrong-doers were made more extensively available for the benefit of the community at large in other nationalities.
Women as editors and journalists are now increasing in numbers in more countries than our own. Mrs. Emily Crawford is one of our leading journalists, having been French correspondent of the Daily News, Indian Daily News, New Tork Tribune and Weekly Despatch, besides being a contributor to Black and White, The Century, and the Contemporary Reziew, besides transatlantic reviews. Mrs. Crawford is a woman of great originality as well as of energy of character,
combined with the charm of a kindly nature and gracious manners.

As yet we have no very remarkable women illustrators; but we have made a creditable beginning, and amongst them Mrs. Allingham in our own country, Miss Alice Barber in America, and Madame Lemaire in France. I might name several more of our own lady journalists, and a legion of clever and useful magazine editors and contributors ; but with the one I have named as a representative woman I will content myself, and with scores whom I might do well to name, both in that hot-bed of female writers, America, and elsewhere, I will only name two or more, and these amongst our Italian sisters of the cloth. Matilde Serao of Naples is now conducting her own paper, IL Mattino, and for many years she had the charge of the literary department of the Corriere di Napoli. She is said to be a brilliant writer. At Rome the daily paper, $I l$ Torneo, is under the direction of Olga Assiana Lodi, and La Donna has been edited for a quarter of a century by Gualberta Alaida Beccari. In Japan the women's movement has had a rebuff in this connection, for, by a new enactment, women ate not permitted to become either editors or publishers. But educational work is on the advance, even amongst these partially enlightened and prejudiced people, and the masculine mind which has made such very great advances in almost all other respects within the last few years will expand considerably more in time, and the prejudices of centuries in reference to women will be thrown off with their old baggy draperies and their ill-fitting, whitesoled slippers. A school has been opened by a highly educated Japanese lady, Mrs. Tel Som, for the teaching of women of her own position in life.

To return to the question of women editors, I believe that there is but one at present in India, and she conducts the Simla Guardian, viz., Miss Alice Goodall. Here in England we have had and still have lady editors and sub-editors very many, and probably my readers are well acquainted with that fact, and with the names of not a few. Amongst Italian lady-contributors of scientific articles to magazines, reviews, and medical journals, I may name Dr. Giuseppina Cattani, the Assistant Pathologist of the University of Bologna, who writes for several medical papers. She is also distinguished as a clever microscopist. In America the Anthropological Society of Washington has made four ladies honorary members of their institution in recognition of their contributions to ethnology, viz., Mrs. French Sheldon, the African explorer, Mrs. Anita Newcomb McGee, M.D., daughter of the distinguished astronomer, Miss Alice Fletcher, who has made researches and studies amongst the Northern Indians for the Peabody Institute of Cambridge (U.S.A.), and Mrs. Tilly Stevenson who is completing, if she has not already accomplished, the studies of her late husband of the Zunni tribe.

In the preceding part of this series, I spoke of the "Association of Women Pioneer Lecturers," and I should do well to observe that, taking a leaf out of the excursionist's book, they "personally conduct" visits to the Royat Academy, the Museums, and elsewhere, under the guidance and tutelage of Miss Annie Evans, the lecturer on history and the theory of art at the Datchelor Training College. Courses of lectures on all kinds of subjectson flowers too, which would probably be very attractive to many-have been and will be given. The strenuous exertions made by clever, well-informed women to help forward the imperfect education of their countrywomen is certainly a remarkable characteristic of the times. The small Directory of Girls' Clubs gives abundant evidence of this, although a large and ever-increasing number of these
societies might be added to the list, the most important of which was the College by Post, inaugurated and conducted by Miss M. Petsie, B.A. Not alone in Great Britain and America does this effort exist, but in some other continental countries. In Italy there is good work in progress in behalf of the higher education of women, carried on by distinguished persons of the same sex. The directress of the royal schools of Northern Italy, Felicita Morandi, is a valuable writer on educational subjects for young people, and both Ida Baccini of Florence, and Virginia Treves likewise (who writes also for adults), the Countess Irene Della Rocca supplying girls with stories and valuable historical works. I may add that Caterina Pigorini Beri devotes her pen more especially to the benefit of the lower classes in the labour fields.

A new idea has been started with a view to secure thoroughness in every department of domestic economy, and the High School at Middlesborough has the credit of it. I refer to the Housewife's Diploma. In Chicago there is a new society, entitled the Columbian Association of Housekeepers. Skilled labour in every department of home-work, especially as regards sanitation and the culinary art, are chiefly in view; and the necessity for an absolutely correct acquaintance with them on the part of the mistress of the house, so that she can direct her servants, and rectify their mistakes. A Business Training Class, where students will be prepared for examinations by the Society of Arts, has been proposed, and, perhaps, already inaugurated by Miss Cecil Gradwell and Miss Richards. According to their scheme, the class was to be established at 5, Victoria Street, Westminster, and the course of studies to include type-writing, shorthand, book-keeping, and office work, the French and German languages, and instruction in foreign commercial terms. Although this useful institution is not of very large proportions as vet, I name it as being likely to prove a small item of valuable information to the readers of this magazine.

To return to the subject of new fields ot work adopted by women in the great struggle for existence, and the utilisation of all natural gifts to that end, I may name that of female detectives. Across the ocean (at Chicago) these persons earn good salaries. Feminine quickness of intuitive perception would render them specially qualified for intricate investigation. Of course it is always open to a woman to decline to undertake certain objectionable cases, and to accept only the following out of clues that will further the course of justice, and benefit their clients in a multitude of ways, such as the tracing of friends and relatives who may have disappeared ; of next of kin heirs and legatees, and of lost property, etc. Two women, Eva Peyser and Lena Vorzemer, are employed in this capacity by the largest New York "provider." These are both young girls, having a remarkable aptitude for their business, and are in the receipt of large salaries, and a very considerable wardrobe. They change their dress twice daily, and so well do they disguise themselves, that it is said no thief in New York could be sure of the identity of either of them. Of course they go through much fatigue, and even personal danger on some occasions.

Still-room manufactories are well conducted under female direction. In the olden times there was always one, with its special superintendent, in every large country house of the nobility and gentry. Now, they are comparatively rare. Mrs. Cornelia Gray has a laboratory in London, where she distils all manner of sweet-scented herbs and flowers in the old-fashioned and well-approved way. This description of industry has always been equally shared by women with men.

Another line of business, in which suitable
employment has been adopted by women, is in conducting the trade of dyeing and scouring. The largest establishment in the Southern States of America is owned and directed by a woman-Mrs. Pyle, of Richmond, Virginia.

One of the latest ideas in the business line adopted by a lady is that of commercial traveller. Some of my readers may have seen the account of the experiences of one of them, related by herself, in a contemporary weekly, who sees in this business a future of wellremunerated work for many of her countrywomen. Of course, they should travel in pairs, and if one be young, the other should be of middle or more advanced age, to act as a duenna. The vocation is suitable for tradesmen's daughters, and might be specially so in the drapery, lace, silk-mercery, and underclothing departments, when their chief customers would be of their own sex.

Here, in London, we have a firm of women tea-merchants, who have purchased an estate in Ceylon, and employ women exclusively as agents, blenders, tasters, and packers. Their premises are artistically decorated, and have become quite a favourite rendezvous for members of their own sex. I also know a lady (in Ireland), of one of our highest families, who is doing a very considerable business, first of all as an agent for a friend who has large teaplantations in Ceylon, and now on her own responsibility. It is a sweet and clean occupation to mix and pack tea, and to dispatch the orders as they come in.

On the other side of the "Great Fishpond" we have an example of an energetic girl-the daughter of a farmer who met with little success in his occupation-who began with scarcely enough to make bread and pies for customers in a neighbouring large town, and in the course of five years of honest work, with the best materials, has become the most successful baker in New York. When she began to make a little profit, she bought an iron stove for bread-baking, and then a very large brick oven; and now she employs more than a dozen women to bake, and a number of men with waggons to carry the bread and other of her manufactures to her customers, and she is fast making a fortune without ever having raised her prices or adulterated her bread.

New inventions are being produced by women of every description, mostly in small but useful appliances, of which I have recently read accounts, and should like to give a specific enumeration of them. A "flying tricycle" is the last idea, just patented by a woman in America. Hitherto women have never had any instruction in mechanics, but when accorded this, our latent constructive powers may benefit the world with some valuable things.

An "indexing office" has been instituted by Miss N. Baily, at No. 3, Keppel Street, Bedford Square, constituting another advance into formerly untrodden fields of useful labour. Miss Baily was sole indexer of Hansard's Parliamentary Debates, and holds high testimonials from the Speaker's Secretary and the Librarian of the House of Commons.

The progress of women's education, theoretical and practical, is so extensive and so full of interest that it would be impossible to limit its consideration to a few pages only. Moreover, it would be a pity to deprive our girlreaders of any information respecting facts so specially interesting and important to themselves. Thus I conclude this part of the series, with a good deal more in my note-books to lay before them: and I hope that many suggestions may be supplied which will prove not only of interest to general readers, but encouraging and profitable to many a wouldbe worker in the world of women far and wide.

## THE PROGRESS OF WOMEN'S WORK.

By S. F. A. CAULFEILD.

PART IV.


N this, the concluding part of my series, I propose, not only to pursue the subject of Women's Progress in its onward march into further fields of multifarious work, but to gather up the threads of what sailors would call "a yarn," not yet spun out to their full completeness in the three preceding articles. For, as time travels on, new ventures are made, and new successes follow; and the number rapidly increases of women who work efficiently; albeit, some on humble lines, and for ever unknown to fame; yet with ample credit to themselves, and unquestionable benefit to others. And so, likewise, the roll of distinguished names amongst women of splendid abilities, and of energy equally great, shows day by day, and month by month, their everincreasing numbers.

I may extract a few passages from a Transatlantic paper. "The girl-graduates this year are unusually interesting. They include those who have taken courses in Law, Medicine, and Theology, Bachelors and Masters of Arts, and one or two Doctors of Philosophy. At Vassar the themes of their commencement addresses included for example, 'New Prison Methods,' ' Spiritualisation of Thought in France,' and 'Mediæval and Modern Charity.' Even in their school-days they dream of uplifting and bettering the human race, the great Motherheart of womanhood, speaking through the enlightenment of woman's brain. When Vassar college was founded, solemn old gentlemen doubted whether it would live, 'the delicate female brain could never bear the strain of severe study.' But Vassar has passed its twenty-seventh anniversary, and numerous others for women have been established; and nearly every college and university in the land is open to them. And the 'delicate female brain' steals away the best and most difficult to obtain of the prizes and collegiate honours to be conferred." By the terms of Miss Garrett's gift to the medical school at "Johns Hopkins University," the award of Honours will be absolutely impartial in that school, and a graduate of Vassar, Miss Christine Ladd, was the first permitted to enter as a student. The first woman who received from it the degree of Doctor of Philosophy was Miss Florence Bascom, who had previously taken the degrees of Bachelor of Arts, Literature, and Science, and Master of Arts. At Columbia College, New York City, Miss Laura Grace Levy won the Mathematical Prize over a number of young men competitors.

It is pleasant to hear that the Philosophical Faculty of the University of Heidelberg have admitted women students to the degree of "Doctor," and a Fräulein Windscheid is about to compete for it. At Gottingen, similar facilities are offered, and two English ladies who have already studied mathematics at Cambridge, are attending lectures there.

Before concluding this department of women's intellectual culture, I must add a few more instances of the highest culture attaining the highest academical honours. The Misses A. M. J. E. Johnson, and E. A. Stoney attained to the position of "Wranglers" last year. Both these studious and gifted lady Wranglers are distinguished as regards sports-the latter a tennis champion. Amongst other remarkable women of Girton and Newnham who have risen to positions of the first eminence,
senior and junior "Optimes," and first-class honours in the Natural Science, Classical, and Historical "Tripos," I may cite, for example, Miss Minnie Baldwin, Miss Edith Purdie, Miss Edith M. Platt, Miss Norah L. Fry, and Miss Lillian C. A. Tomms (now Mrs. Henry Clarke). Also at the London University, Miss Maria Ogilvie has passed the examination for the degree of "Doctor of Science" with the highest credit, having previously gained the Gold Medal as the Head of the Ladies' College, Edinburgh, and a Prize of fioo. In 1890 she obtained her degree as Bachelor of Science at University College, London, and was awarded the Gold Medal for Zoology and Comparative Anatomy. Space would fail me, or I should like to add very many more distinguished names; but I cannot even record all the honours attained by the gifted women already named.

Having spoken of distinguished scholars of Girton and Newnham, it is only fair to conclude this part of my subject by observing that the newly appointed Principal of Bedford College, is Miss Emily Penrose, a student of Somerville Hall, and a brilliant classical scholar.

Again reverting to women's progress in America, I may mention that Miss Alice Heald, for several years past a County " Superintendent of Public Schools" in Iowa, was appointed (about a year ago) a member of the "State Board of Éducation," and having been proposed as the Republican nominee for "State Superintendent of Public Instruction," was so heartily supported by prominent persons connected with education in that State, that no doubt she was duly appointed to the office. Already I have referred to lady astronomers, and may add that Miss Mary Proctor, the daughter of the late astronomer, R. A. Proctor, is delivering lectures on Astronomy to young people, under the management of Major Pond, Everett House, New York.

It is a fact worth recording, that a Miss Knowles has been elected Attorney-General of the State of Montana, U. S. A., after a spirited campaign against two male competitors, and at the age of twenty-eight. It may be observed that while having a strong, firm character of face, she is a pretty woman; and it certainly is not those who have little chance of making conquests amongst the stronger sex that devote their time and strength to intellectual labour.

I spoke of Miss Millicent Fawcett and Miss B. Lamm as distinguished sanitary engineers, and I should have mentioned another, practising in the same profession, Miss Mary Bryant. Having been recommended as a promising scholar by the Durham College of Science, and being a graduate of the London University as well as of Durham, she undertook, some little time since, to investigate by the method of thermo-electric functions the changes of temperature which boiler-plates undergo during the conduction of heat. This was really a valuable application of knowledge and ability; for an accurate acquaintance with the conditions to which these plates are subject is a matter of considerable importance in marine engineering. It has been said that women have no gift for producing mechanical inventions; but with a wider field opened out to them, and better opportunities for the development of their abilities, we find already a small harvest of useful appliances springing up in many lines. Amongst a great variety of such inventions, including the "flying tricycle," recently patented in America, and before-named, we find the "Burden Horseshoe machine," which turns out a shoe every three seconds. Another invention is that of a combined house-heater and kitchen range;
devised by a Mrs. Wilcox ; which is so perfect in its construction that a house of ten rooms can be heated during a period of twenty-four hours, and the cooking for the family accomplished with four ordinary scuttlefuls of coal only. It may be interesting to some to know a few particulars of its construction. A coil of pipe passes through the furnace part of the range, and through this pipe the water circulates; and it is heated and passed to the different rooms through other pipes, packed with asbestos to retain the heat. This ingenious invention was exhibited at the Chicago "World's Fair." I cannot afford to give further space to examples of women's mechanical capabilities, which for lack of teaching have lain dormant.

Engaged in another department of practical science we find Miss Mary O'Brien, of University College, Aberystwith, who is attached to the Oxford Botanical Laboratories, and devotes herself to the assimilation of nitrogen by leguminous and other plants. Women gardeners are much on the increase, and the good feeling of the "Kent County Council" has been shown in throwing open to their competition (with men) thirty-five scholarships of 660 each, and some at 630 , at the "Swanley Horticultural College." It is estimated that there are at present 6000 lady-gardeners in London alone (including the suburbs) who keep private gardens in order, either by the day or by contract; and classes are numerous round about London on the flower farms for their training.
Perhaps the creation of a lady mayor (not " mayoress" by marriage) may startle some of my readers. But the lead, as in the granting the franchise to women, has been taken by our own colony, New Zealand. The lady who holds the highest office in Onchunga is a Mrs. Yates, and she has had considerable experience in municipal affairs, her husband having filled the position she now holds for four years, assisted by his wife. She is a woman of exceptionable ability and clearness of mind, as may be supposed, her strength of mind being stamped on her countenance. Some of the rules she has instituted seem admirable. She says," There should be much less talking "-fifteen minutes is the limit in her council, and five for a reply. She favours the institution of lady jurors and police warders, holding that no woman should be denied a woman to look after her. Mrs. Yates is herself a "Justice of the Peace," and since her appointment as mayor, a lady of Christchurch, and another of Dunedin, have been made Official Inspectors of Lunatic Asylums, with the powers also of Justices of the Peace.
A few words now on the subject of fresh, so-called "departures" in the manual employments and trades taken up by women. I am not able at this moment to say how many women are engaged in trade in this country, but in Paris there are 8000 women said to be doing business on an independent footing. Here we have 58,000 women enrolled in "Trade Unions." I do not name this with any idea of approval, but simply as proving their probable engagement in business, and the combined effort made to such an extensive degree in the supposed interests of trade. One lady, Miss Beatrice Potter, deserves well of the manual bread-earners as having written and read a paper on "How best to , do away with the 'Sweating System," at a somewhat recent congress of co-operative societies, and published at the "Co-operative Union, Limited" (City Buildings, Manchester). I have not read the paper
myself, but it is said to demonstrate "how thoroughly a woman may master the details of a branch of social economy," and it is described as " a treatise which is as interesting as it is instructive."
Not even service in the passenger and mercantile navy is a forbidden vocation to a small proportion of energetic women having a special fitness for the duties such a command entails. There are properly licensed and certificated marine captains or "skippers" commanding steamships of the American passenger and mercantile navy who are women qualified as such; and there is also a female " purser," the first in the field (and there may now be others), Miss Beulah True. She was appointed to the Emeline of the "Maine Central Steamboat Service," the daughter of the captain. She is qualified as a navigator, could steer the ship from the age of eleven, and has acted as her father's " mate"-in every sense of the word- on many a long voyage. She is a clever artist likewise, and drew the illustrations for a history of Hancock, Maine, which has recently been published. She is only just out of her "teens," and is very pretty, gentle, and graceful. She likewise holds the appointment of " freight clerk and messenger for the American Express Company." Another young and beautiful woman has accompanied her American Arctic-explorer husband, Lieutenant Peary, on his expeditions to the region of the North Pole, and has braved all the dangers, fatigue, and privations of an Arctic winter.

The wife of Captain Healey, U.S.R.M., has also accompanied her husband four times to the Arctic regions in the revenue cutter Bear. These enterprises are not uncommon amongst the wives of sea-captains. Some very remarkable instances of the ability and courage exhibited by women, when the whole care and navigation of a ship has been entirely left in their hands, are on record, no advantage of previous training for such work having been utilised in these cases of extreme and unexpected emergency. I may here add the name of Mme. Nansen as an enterprising, fearless, and capable traveller, who proposed to join the expedition to the North Pole with her distinguished husband. But on the present occasion the state of her health precluded the carrying out of the enterprise. I have already named some energetic and practically useful and benevolent women explorers, and may include the name of Miss A. Taylor, who has written a work on her travels and adventures in Thibet.

It may surprise some of my readers to hear that we have already a lady stockbroker, and one of whom the highest opinion has been expressed. She is not enrolled in due form as such; but this is no bar to her practising in that capacity for those who feel confidence in both her ability and her integrity. I refer to Miss Amy E. Bell. This lady had a distinguished career at University College, Bristol, and a brief sojourn also at Newnham. She never advertises, and undertakes no speculative accounts whatever; and although a mere outsider, she has gained a reputation for highlytrained ability and absolute integrity, and has carried on her vocation for a period of about eight years.

I made some reference to women as illustrators; and picking up another of the dropped threads of the "yarn" which I am spinning, I am only just in giving two more names of
women who are doing greatly-approved work in this line. These ladies are sisters, students of the Royal Academy, Miss Gertrude Hammond having been the winner of the f40 prize offered by the Academy for the best painting of a frieze subject, and one of her pictures having been recently purchased by the Empress Frederick. Excellent work of theirs in black and white have appeared in the Idler.

I might fill many columns with accounts of the several branches of philanthropic work carried on by our English women on a large scale; but I think it best to draw your attention to the new publication of a series of "Congress Papers," edited by the Baroness Burdett-Coutts, by command of Her Royal Highness the benevolent Princess Christian. It is entitled Woman's Mission, and was specially prepared for the Royal British Commission of the Chicago Exhibition (Messrs. Sampson Low). Women's work for children, and ragged schools, for girls, soldiers and sailors; for emigration also, and work in connection with the Church of England, are all dealt with amongst the subjects contained in this volume; together with sick-nursing, guardiansbip of the poor, and art, including needlework, etc. The efforts made for the reform, help, and elevation of their fellow-countrywomen-and men by no means ex-cluded-by " honourable women, not a few," is a leading feature of the times. The example given by many members of our own aristocracy is worthy of universal emulation. At the head of these we have that of the Princess Cbristian, who, amongst many other efforts for the public good, established the School of Art Needlework, South Kensington, and the Girls' College, for their training in many departments of practical work, at Ealing.

Lady Henry Somerset is President of the "World's Woman's Christian Temperance Union for Great Britain," and the British Temperance Association, and is the leader of the White Ribbon Band, and of the Upward and Onward Association. The Countess of Carlisle is likewise an active worker in the Temperance Movement. The young Duchess of Montrose is giving her time and attention to the training of wives; and at the recent opening of the institution to which she has given her patronage, she made an admirable speech on the lack of knowledge amongst the lower classes of how to make a man's home comfortable; and likewise on the wretched, haphazard, so-called " training " of domestic servants, so large a majority of whom demand wages which they are not qualified to earn honestly. Miss Eleanor Benson, who a few months ago fell a victim to diphtheria contracted in the course of her district-visiting, bequeathed $£ 2000$ to the parishes of Lambeth for the purpose of training girls as servants, providing them with outfits and the means of paying for a holiday. Miss Tait, daughter of the former archbishop, is appointed to administer the fund. The young Duchess of Sutherland is another champion of temperance, and presiding over a meeting of 2000 women very recently at Hanley, she made an admirable speech. Another successful worker in the cause of temperance is to be found in Miss Frances Willard, M.A., President of the World's W.C.T.U., and of the National Sister Association, U.S.A. This lady was the first dean of a woman's college. Again, through the energetic action
taken by another American lady, the daughter of a Governor of Ohio, some hundreds of drinking-saloons were closed.
Turning to a different field of labour, let me draw attention to the mission of Mrs. Hannah Whitall Smith, Superintendent of the Society for Inaugurating Bible Reading for the World's W.C.T.U. The best known of her works is the Secret of a Happy Life, which has gone through forty editions, and, including Cbinese, it has been translated into more than a dozen languages. Here, in England, we have such an army of influential women engaged in similar or other valuable work, both of the higher and middle classes, that I cannot attempt to extend my list. Yet I should particularly like to name the work carried on by the promoters of Biblereading and prayer associations, which are so frequently named in the Correspondence columns of this Paper. A woman's accredited and authorised position, in regard to all such work is clear, from the terms with which St. Paul speaks of them, and the encouragement he commands to be given them (Philippians iv. 3), "Help those women who laboured with me in the Gospel, with Clement also, and with other my fellow-labourers, whose names are in the book of life."
The new movement set on foot by Miss Stokes for the inauguration of a Female Volunteer Medical Staff Corps, placed under the same conditions as to military discipline and medical training as the staff corps of men, is an excellent undertaking. There will be no superficiality in their qualification in every branch of the work undertaken, including cooking, camping, transport, mending of carriages, harness, and tents, etc. On the occasion of the Egyptian campaign 1500 nurses volunteered for war-service.
How can I close a subject so full of interest to those for whom this magazine is specially provided, when so very much yet remains to be told? But all things must come to an end, and I will only add that the Report of a Royal Commission is about to appear on the question of women's wages, which are so inadequately paid, as compared with that which men claim and receive. I am glad to see that two fresh nominations have been made to women of appointments as Female Inspectors of Factories and Workshops. That women are found quick, efficient, and conscientious in places of trust has been more than demonstrated, and they are found able to compete on even lines with their brethren, and rise to the highest positions. Only recently Miss Arundel Colliver has retired from the Clearing-House branch of the General Post Office, where she entered as a telegraphclerk twenty-three years ago. The next year she rose to be chief of the branch, charged at $£ 250$ per annum, and ten years ago at $£ 400$. This may be an encouraging little piece of information to many. Once more, in conclusion, we must not yet imagine that we "have the world at our feet." Amongst other populous countries we are a "drug," as in the "celestial empire." Even some of their ponds are too select for the reception of such worthless trash, amongst those whose proverb would teach us, "the worst son is better than the cleverest daughter!" A notice (we read in a contemporary) is now affixed to a large piese of water at Foochow: " Girls must not be drowned in this water."


