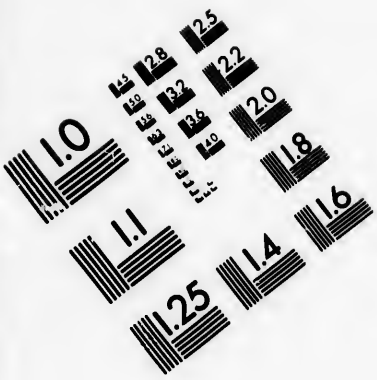

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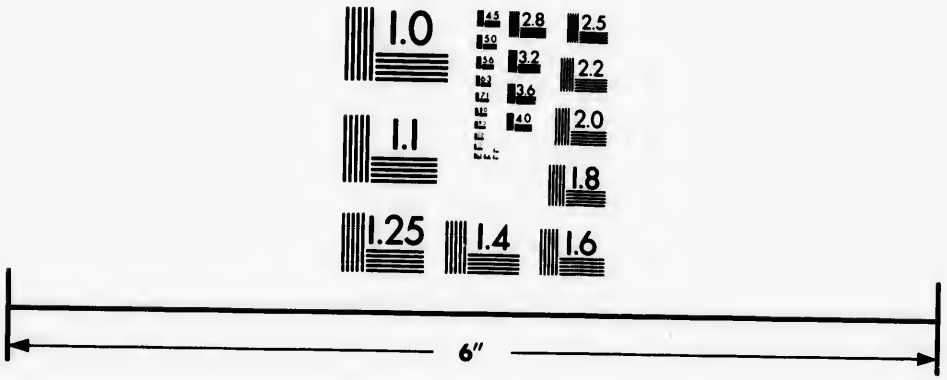

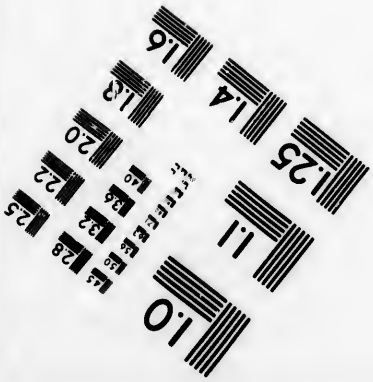

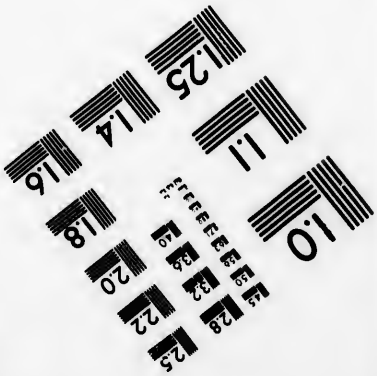

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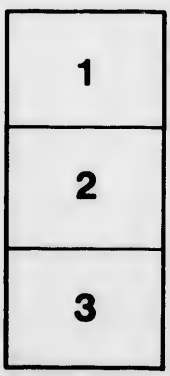

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PREFATORY NOTE.

"A THOUSAND WAYS TO EARN A LIVING" aspires to materially assist the millions of people of all ages and in every position of life, who are obliged to ask themselves the important question, How shall I get my bread?

The compilation of the work has consumed the greater portion of the Editor's time and that of his two able assistants since August 1886. The system on which the book was formed was as follows:—A list was made of every branch of all known occupations, businesses or professions. On careful examination at least ten per cent. of these employments proved to be of such a transitory nature that it was probable that before the work was completed they would have passed out of existence. And so rapid are the changes which take place in the labour world at this end of the 19th century that, at the last moment, it has been found necessary to strike out many ways to earn a living which, since information about them had been gathered together, had become out of date.

The Editor's original intention was to select a thousand of the most important employments and devote a paragraph of sufficient length to each. But as the work proceeded the necessity for a deviation from the strict original intention became more and more obvious, and so the present plan, by which all leading ways to earn a living are dealt with fully, and minor kinds of employment referred to more or less amply, came to be adopted.

The rates of remuneration, probability of obtaining employment, and all facts and figures have been taken from the lips of those actively engaged in businesses. Their statements have been mor over, corrected by comparison with others similarly employed. But it must not be forgotten that salaries and wages differ in every portion of England, Scotland, and Ireland.

The employment of women is a matter now engaging the attention of members of almost every middle-class household. Most of the recognised branches of recognised employment seem so over-crowded that the average young woman may well regard with despair any other outlook but matrimony. In the course of the inquiries necessitated by this book, it was found that there are still plenty of means by which women of all ages can live. Fortunately new methods of money-making are created day by day. After two years of constant meditation upon

the matter, we believe, in contradiction to those melancholy political economists who regard the future of educated women with alarm, that the matter will right itself here, and in the same manner, as it has in the United States. There, the clerical work of offices is almost entirely performed by women. In America, too, manual labour is not regarded as *infra dig.* In the United States a carpenter has at least the social position of a clerk, and a black coat is not more respectable than a white apron.

Now that the upper ten are not above opening shops, our middle class will surely not hesitate to become skilled artisans. A new movement in favour of technical education enables all who wish to become expert craftsmen to do so speedily.

In the not far distant future we believe that the higher branches of commerce, and businesses where superior managerial power is required, will, together with judicious emigration, absorb our superfluous men of the financially talented class; that women will monopolise much of the clerical work now performed by their brothers, that our handicraftsmen will include many of a class that now hesitates to discard its valued respectability, and that emigration will be conducted on a much more extensive system than at present.

If we may be allowed to address a word to the critics, we would ask them not to jump to hasty conclusions respecting defects in any part of this work before carefully perusing the whole. No portion has passed into print without mature consideration, and should any errors have crept in they are the result of that human tendency to err inherent in the most meth[illegible] and accurate.

In order to [illegible] in the production, and, if possible, improvement of future editions, the Editor will be glad to receive suggestions, which may be addressed to him either at *Tit-Bits* Offices, Burleigh-street, Strand, London; or in care of Messrs. Carr & Co., 26, Paternoster-square, London, E.C.

The work will probably become an annual encyclopædia of employment.

The thanks of all concerned are due to those who have supplied the information it contains. Numberless Government officials, Colonial Agents, Secretaries of Societies and Associations, members of countless professions, businesses and trades have assisted, in almost every case cheerfully, and often at the expense of much valuable time and trouble. The Editor has also to mention that a few of the employments for women were suggested by *The Queen* newspaper, and *The English-women's Year Book.*

THE EDITOR.

May, 1888.

CONTENTS.

USEFUL HINTS AND WARNINGS.

CIVIL SERVICE.—All communications should beaddressed to the Civil Service Commissioners, Cannon-row, Westminster, S.W.

———*———

EMPLOYMENT AGENCIES.—Care should be exercised in dealing with these firms; the majority are swindles. "Home-work" advertisements should not be answered.

———*———

BUYING BUSINESSES.—Before buying a business of any kind, let a trustworthy solicitor thoroughly examine into its past history. Never trust the statements of the vendors, or of agents in whose interest it is for you to buy.

———*———

DEPOSITS AND GUARANTEES.—Do not be induced to deposit money as security for your honesty with firms or individuals, however tempting their offers may be. No good firm requires small sums of money in this manner. If security money is absolutely insisted upon, offer to cover your liability by insuring in one of the numerous societies which have been established for this purpose.

———*———

TO PARENTS.—Before letting your sons or daughters enter the employment of any firm or individual with whose history and standing you are not personally acquainted, make a few inquiries as to its, or his, stability and reputation.

———*———

TO THOSE ENTERING TRADES.—Do not enter upon a trade or other occupation which is likely to be superseded. There are many industries which have been extinguished during the past ten years. Even in the course of writing this book the compilers have witnessed the almost total disappearance of many of the minor industries.

———*———

TO CLERKS.—Unless you do not desire to make your position in the world assured, use all your spare time in arming yourself with such useful weapons as shorthand, the type-writer, a language or two, and the thorough mastery of every detail of the work in which you are engaged. If you remain a mere departmental clerk, you will find it difficult to secure occupation if you lose your appointment.

A THOUSAND WAYS

TO

EARN A LIVING.

ACTORS.

THE stage has now become a not unusual way to earn a living. Except for genius of exceptional merit, it is not lucrative; but it is at least as well paid as the general run of businesses. Nor is it at all difficult to become an actor. The dramatic clubs established in almost every town afford ample opportunities for amateurs of talent to acquire the rudiments of the work. It would be well, for a variety of reasons, for a young man to cool his ardour by attaching himself to one of these associations. The subscription is generally trifling. After a couple of years at this kind of work, it will be easy to ascertain from the criticisms of friends and foes whether any real talent is possessed. If it is then determined to adopt the stage as a means of earning a living, the procedure will be that which we have recommended to the consideration of would-be actresses in the next section of this work. The late Mr. Dutton Cook, than whom no better judge of an actor's qualities ever breathed, in summing up the attributes necessary to a successful actor, remarked that the physical powers of a really clever man merge into the intellectual, and that in the matter of elocution it is impossible to distinguish them. A sense of rhythm, which is indispensable to an actor who walks in the higher ranges of the Art, is an intellectual power. It may be, he said,

also acquired by a careful tuning of the ear to the rhythmical cadences of the best poetry, but it is still more a natural gift; for in the actor this sense is, to all intents and purposes, non-existent, unless it is able to find spontaneous expression in that perfection of elocution which Hamlet described to the players. The power of self-annihilation, again, involving that of conceiving and realising character, which is another requirement of a first-rate actor, is a quality which he shares with the poet and artist of dramatic genius; and it is one which, whatever may be its ultimate origin, is practically a Divine gift, for it cannot be reduced to any laws whereby it may be acquired. But meanwhile, in this case too, careful training and cultivation are essential. "My long experience of the stage has convinced me of the necessity of keeping, on the day of exhibition, the mind as intent as possible on the subject of portraiture, even to the very moment of entrance on the stage." Thus wrote Macready. The rarity of really fine acting is due to the difficulty there is in being at one and the same time so deeply moved that the expression of an emotion may be universally intelligible, and yet so calm as to be perfectly sure of avoiding ugliness or excess, and of attending to such minutiæ as not turning the back upon the audience. Another quality requisite to an actor is an unerring sense of humour. Want of this is the rock upon which many otherwise admirable actors are wrecked. Men may have plenty of appreciation of the ridiculous in real life, but it is very hard for them to preserve it when they are acting a part, and when indeed the better actors they are the more unconscious they will be of the exact appearance which they are presenting. It is experience alone improving a natural gift that can equip the actor with all he needs. With regard to voice, only a long and careful training can give the actor a flexible elocution, an easy naturalness as opposed to artificial "mouthing." The appearance of volition and perfect ease which characterises the great actors has cost them much toil and time to acquire. It is training alone which can secure a suitable and modulated gesticulation. All exaggerated natural expressions in order to give effect must be avoided. To be effective, gestures must be significant; and, to be significant, they must be rare. The young aspirant to histrionic fame should, after reading the advertisements in *The Era* newspaper, call upon likely managers, and, if his appearance and address are suitable,

he will probably get a small appointment as a "super," at from 1s. 6d. to 2s. 6d. a night.

ACTRESSES.

In order to earn anything more than a bare living upon the stage, it is now necessary that a thorough course of dramatic education should be gone through. The stage has become so much in demand of late years by persons of means that none but the most talented can make much progress, unless supported by wealth and influence. If a young woman definitely makes up her mind to become an actress, she should apply to a leading theatre for a position as supernumerary, or "super." Her part in a theatrical performance, if she manages to get "taken on," will be a most insignificant one. She may carry a banner in a procession; but she will have no opportunity for the display of her talent. Little by little she may be promoted, until she will have the honour of being allowed to speak a "Line." Her wages up till this period will not have exceeded 10s. or 15s. per week, and for this she has to attend nightly, and frequently at rehearsals also. Rehearsals are most fatiguing. They last for hours, often for a whole day. When the actress has worked her way up to speaking parts, she will do well to study elocution under a good master or mistress. There are many retired actresses, many of them of distinction, who make a profession of teaching the new generation. . . . We would particularly warn aspirants against the advertising rogues who thrive at the expense of those who wish to get on the stage. These men state that they are able to get positions for applicants, and demand commissions, premiums, and booking fees. Their advertisements may be seen in numbers in almost any daily paper. As to the pecuniary prospects of a life on the stage, it is difficult to speak. . . . So much depends upon individual talent and application. There are many actresses earning as much as £30 to £40 per week; but it would not be at all fair to take these as criterions. Moreover, it must be remembered that at the present time the stage is undergoing a phase of prosperity unknown in any previous age, and that it is probable that actors will, as artists are at present doing, feel the effects of the anti-climax which inevitably follows the afflation of any particular industry or art.

ACTUARIES.

This is not a profession which affords much scope. It can only be recommended to those possessing arithmetical talents in a marked degree. The business of an actuary is, briefly, the management of the delicate matters and calculations connected with life and fire assurance offices and kindred concerns. The Institute of Actuaries, established in 1848, and incorporated by Royal Charter in 1884 (9, Adelphi-terrace, Strand, W.C.) provides a good deal of information respecting an actuarial education. We find that a number of examinations must be passed. The first is a preliminary examination, in (1) Writing from dictation, (2) English composition, (3) Arithmetic, (4) Elementary Algebra, but not beyond equations of the first degree. On passing this examination a candidate is admitted to be a student. He must first, however, before entering for the admission examination, fill up a form, in which he states that he is over 16 years of age, and that he is desirous of admission to the Institute of Actuaries. As a student, he must obtain the signature of two members of the Institute. It is essential that these two are either Fellows or Associates. The preliminary examination is merely formal. Its aim is to test the general acquirements in education of the candidate. In some cases the council relieve the student of the onus of passing the admission examination. In the event of a candidate failing to pass the preliminary, he will be allowed to enter another examination within six months. If he fails on a second trial, the fee paid on application (one guinea) is forfeited. There is an annual subscription of £1 1s. for the Institute. The examination for the Associates of the Institute are held in each April. The examination is divided into two parts, between which at least twelve months must elapse. The subjects are (1) Arithmetic and Algebra, including theory and practice of logarithms, and the elements of the theory of probabilities. (2) Euclid, Books 1 to 4; definition of Books 5 and 6. (3) Elements of the theory of finite differences, including its practical application, and interpolation. (4) Elementary plane co-ordinate geometry, as applied to the straight line and the conic sections (optional). (5) The principles of book-keeping. The second portion of the examination comprises the following subjects :—(1) Theory of compound

interest, including annuities—certain. (2) The application of the theory of life probabilities to life contigencies. (3) The theory of life contigencies, including annuities and assurances on lives and survivorships. (4) The use of mortality tables, and the construction and use of other tables in relation to the theory of life contigencies. (5) Practical examples in all the foregoing subjects. (6) Elementary, differential, and integral calculus (optional). The rules relating to the admission to the degree of Fellows, may be had on application to the Institute.

AGENCIES FOR COLLECTING EXTRACTS.

There are now agencies for collecting extracts on any given subjects from English and foreign newspapers, which have opened a new employment for a limited number of women. A month's training is necessary to accustom to get quickly at the gist of the articles and to sort them under various heads. At the end of the month the collectors receive from seven to fifteen shillings per week. The hours are from nine to seven. The principal offices in London are Curtice & Co., 13 and 14, Catherine-street, Strand, and the Press Cutting Agency, 17, Southampton-row, W.C.

AGRICULTURE.

Farming is not usually considered a remunerative occupation, and it would certainly be unwise to enter upon it without serious consideration. Formerly men became farmers without any scientific education whatever. To-day it is necessary to study at one of the Agricultural Colleges. The two best known are at Aspatria (Cumberland) and Cirencester. For training suitable for colonial farming, "The Colonial College," Hollesley Bay, Suffolk, is a well-known institution, there are also Agricultural Colleges at Tamworth and Downton. The expenses of farming have greatly increased during the past thirty years. Formerly agriculturists spent as little per acre as possible. To-day farmers cannot limit their outlay. It is probable that were more attention given to fruit farming, on the principles laid down by Mr. Gladstone, it would be remunerative. (See Fruit Farming, and Poultry Keeping.) If the expenses of agricultural education at the colleges is too great, we recom-

mend intending farmers to obtain a position as pupil on a well-managed establishment. A premium must be paid, and this varies from £30 to £50 on small farms, and from £100 to £300 on larger ones.

ARCHITECTS.

There is no fixed rule governing admission to this important profession. True architectural genius is manifested at an early age, and cannot be trained too soon. The theoretical knowledge can be acquired either by private reading, or by attending the scientific classes of such institutions as may afford instruction in the principles of architecture and construction. The history of Architecture, from the first, should be well mastered, yet not permitted to occupy the mind of the beginner so entirely as to make him a pedant. The premium usually paid by a pupil to an architect varies according to the prestige of the principal. In the country the pupil will often board with the architect, and this will make a considerable difference. The usual premiums are either 100 guineas, 200 guineas, or 300 guineas. It is not absolutely necessary to pass any examinations, but the men who are connected with the societies which have been formed by architects themselves for the elevation of their body carry a good deal of rank with them. The Royal Institute of British Architects has promoted certain examinations which are open to anyone studying for the profession. The passing of these is an acknowledgment that the architect is proficient, and fit for practice. The first examination is the preliminary. It is open to all students who have been for a year in an architect's office. It is held biennially, provided that five candidates present themselves for examination. Candidates must send in their applications six clear weeks before the first day of the examination, which is advertised in the papers dealing with architecture. The examining fee is £2 2s. The subjects are freehand drawing from the round, as for instance a vase or ornament. Freehand drawing from memory from any similar subject is also given. Drawing from memory of any of the distinctive styles at the choice of the student. Arithmetic, including decimal fractions, and square root; Algebra; Euclid, as far as the third Book, practical geometry, materials (how employed in building), English history generally (the student allowed the choice of any cen-

tury from A.D. 1000 to A.D. 1700), art history (the student gives the dates and the principal characteristics of some of the leading examples of the architecture of any country he may choose to select). The extra subjects (the choice of any two optional) are modern languages, figure drawing from the cast, coloured decoration, and perspective. The full complement of marks to be awarded is 1,000, of which the student must gain at least 600 in order to pass. Successful candidates are entitled, without fee, to the privileges of a student of the Institute for two years from the date of each examination. The second examination is entitled "The Examination in the Class of Proficiency." It is held in May, in every second year, and is open to all persons studying the profession of architect. The examination fee is £4 4s.; but, should the candidate fail, he will be allowed to present himself at the next examination without further payment. There are two sections, artistic and scientific. In each, probationary work is given to be done at home. The first generally consists of a measured sketch of some existing building, a perspective ditto, ornamental drawing, and a perspective view, with plan and elevation of a design for a building by the candidate. The scientific probationary work is a set of working plans, and a complete specification of the works for a building designed by the candidate. The examinations for the Moderators extends over a week, from 10 till 5 daily, half an hour allowed for luncheon; Monday, Wednesday, and Friday are devoted to the artistic section, which comprises a design of some building in the style named by the candidate, the subject being given by the examiners (400 marks); geometrical drawing (150 marks); perspective (250); history and literature, an outline of certain characteristics of the principal historical styles of architecture (250). For the scientific portion, mathematics (150 marks); mensuration (100 marks); physics (150 marks). The principles of estimating, the law and custom relating to accident, agency, contracts, and dilapidations (100 marks). The general nature and properties of building materials (200 marks); the practical processes of building operations and questions of structure connected therewith (300 marks). A certificate is given to those who pass in both sections, whether taken together or in two separate years, and such certificates are regarded as a diploma or professional qualification. Every successful candidate is entitled to a free studentship for four years, and

subsequently to the consideration of the council, for his nomination at their instance as an Associate. Every passed candidate, when a member of the Institute, is entitled to the designation of "Graduate of the Royal Institute of British Architects." There is a third examination known as the "Examination for the Distinction Class," which may be considered as the examination for honours of the Institute. Architecture as a means of living is almost as precarious as painting or authorship. A young man to succeed need have great and exceptional genius, and be possessed of private means, or have many friends who will spend money on buildings in his interest, otherwise he will have to be content with a situation in an architect's office. The usual fee is 5 per cent. on the money expended in the building, but there is no rule of the profession to prevent a man from agreeing to undertake a given piece of work for a stated remuneration.

ARMY NURSING.

There is no more noble occupation than that of nursing, and of Army Nursing in particular. The Netley Sisters are an invaluable addition to the British Army Medical Staff. There are several divisions in the ranks of the army nurses. The majority are stationed at Netley, others are at the other military hospitals. The Nursing Sisters are in all cases "ladies of birth and position," and many of them have private means, so that the salary is of little consideration. The uniform is simple. It consists of a grey dress, a large white apron, a little scarlet cape, a large white lawn handkerchief, folded cornerwise and placed on the head, with the ends tied under the chin, a grey cloak and bonnet. In the house they wear a white frilled cap. The system has worked so well in the army that it has now been adopted in the naval service. Application should be made to Netley Hospital.

ARMY, THE.

This important way to earn a living we will divide into two branches. No. 1. "In the ranks;" No. 2. "Commissons." It is satisfactory to note that the class of young men now "going for soldiers" has been steadily improving for some years. At the present time a large number of sons

of people occupying good positions are working their way up to commissions. The road is a hard one, but not rougher than that on which the young man who goes out to the colonies to fight his own way has to travel. Nor is the life nearly so trying as that of the merchant seaman. But the army is not the life of ease and glory depicted by recruiting sergeants, and no young man should rush into it hastily. "Enlist in haste and repent at leisure" is a pardonable paraphrase of a well-known saying. The age at which one can enter the army is from 14 to 30. Boys may enlist as MUSICIANS, TRUMPETERS, TAILORS, DRUMMERS, or BUGLERS. Provided a lad is possessed of the consent of his parents, a good character from his schoolmaster or employer, and a fair physique, it will be easy for him to get admittance. A boy must be over 14 and under 16. The other branches of the service receive recruits of from 18 to 25 years of age, with the exception of the MEDICAL, POST OFFICE, and ORDNANCE ARTIFICERS corps which have an extension to 28 and 30 years. The height, weight, and chest measurement of leading regiments are as follow :— For the HEAVY CAVALRY, five feet eight is the minimum for the LANCERS, five feet seven ; for LIGHT CAVALRY, five feet six. For the ROYAL ARTILLERY, gunners must be five feet six ; drivers, five feet four ; artificers, five feet four ; and tailors, five feet four. For the ROYAL ENGINEERS, five feet six is the standard ; but shoe makers, tailors, and drivers can be five feet five and five feet four. In the INFANTRY, FOOT GUARDS are five feet eight ; in the LINE, five feet four ; COMMISSARIAT, TRANSPORT, ORDNANCE and STORE ORDNANCE ARTIFICERS, MEDICAL STAFF CORPS, the POST OFFICE CORPS, and others, must average five feet four. Occasionally, in the infantry of the line, a recruit of five feet three will pass muster if he is not more than twenty years of age. It is supposed that the drill and training will develop both height and chest measurement. The minimum weight of recruits for the British Army is fixed at one hundred and fifteen pounds, but the authorities are not particular on this score, if a man's other points are good. The General Orders state :—"The chest measurement and weight of each recruit depends upon his height and the arm of the service he wishes to join, and is left to the discretion of the examining medical officer and the approving field officer." The pay of a soldier is as follows.

It is calculated by days:—In the Household Cavalry a private gets one-and-ninepence; in the Foot Guards, one-and-a-penny; in the Infantry of the Line, one shilling; in the Engineers, one-and-three-halfpence, and so on. It is said, however, that any man who behaves himself will, within two years, become a lance-corporal, and within three or four years corporal; and then the rate of pay is considerably increased. Corporals get from two-and-eightpence to one-and-eightpence. The Household Cavalry, the Royal Horse Guards, the Royal Artillery, and Royal Engineers are the best paid, and the Foot Guards, Infantry, and others are also remunerated at a fair scale. It is possible for a diligent, smart, and well-behaved fellow to rise to the rank of sergeant-major, and then the pay is something like five or six shillings a day. A regimental clerk—and of these there are a great many in the army—starts with two-and-sixpence a day, and then rises by a yearly increase of sixpence to four shillings. It is even possible for the raw recruit to rise until he becomes a quartermaster, and receive from nine shillings to sixteen shillings a day. We believe that it is usual for one man in six to get an exceedingly comfortable berth for himself in the army. Many ne'er-do-weels enlist, and many tire of the service, thus leaving the question of promotion an easy one for the determined and diligent. In addition to pay, a soldier receives (we quote from the official papers, which are somewhat highly coloured) a ration of bread and meat, lodgings, fuel, light, and medical attendance for himself, and, if married (or, we should say, if allowed to be married), for his family. On first joining the army, he is supplied with a complete outfit of clothing and a free kit, containing such necessaries as brushes, combs, razors, &c., and he is afterwards supplied periodically with the principal articles of clothing without charge. He is required to provide himself with underclothing and necessaries at his own cost, and to pay for repair of his clothing while in wear, and for his groceries, vegetables, and washing, but not for his bedding. A soldier, therefore, on joining the army may be said to receive in pay, rations, lodging, clothing, &c., the equivalent of not less than fifteen shillings a week, which sum gradually increases according to his conduct and promotion. He also receives what is known as deferred pay, to the extent of three pounds a year. After deducting all stoppages, a well-conducted soldier has at his own disposal

about four shillings and sixpence a week, out of which a careful man can more than double the deferred pay (twenty-one pounds), to which he becomes entitled on leaving the army for the reserve. Moreover, shooting prizes are open to every one in her Majesty's army. There is an opportunity of learning a good trade, the use of capital libraries, recreation-rooms, and a gymnasium, and at the canteens (which the raw recruit will do well to avoid altogether) tobacco and beer are sold at low prices. When desiring to enlist it is necessary to obtain a copy of Army Form "B 210," or the "Application to Enlist," as it is called. In this the name, address, height, age, and date, and the regiment in which he desires to serve, must be entered. This form can be obtained at any post office, together with a number of somewhat unintelligible particulars of the service. We have mentioned the Medical, Post Office, Military Mechanists, and Ordnance Artificers Corps. The duties of military artificers are the repairing and maintenance of the garrison artillery. It is necessary that they should have some knowledge of mechanical drawing, and a good character is stipulated for. The Medical Staff Corps are becoming practically trained hospital nurses. In war they wear a distinguishing red cross, and are not liable to be killed, except by accident. The Commissariat and the Transport Corps are clerks, bakers, butchers, wheelwrights, saddlers, shoeing and carriage smiths, drivers, and others. So it will been seen that a soldier's life is not entirely given up to drill and warfare. The provident young fellow will carefully consider before enlisting, and will select some branch of the service in which he will gain or increase knowledge which will be of value to him when he has left the army. Considerable misunderstanding as to the terms "long" and "short" services appear to exist in the public mind. Long service is twelve years, and short service is seven years in the army and five in the army reserve. In the Foot Guards short service is three years in the army only and nine in the reserve. In the event of war, soldiers can be retained for an extra year, or longer, if necessary. Well-behaved men and those who are medically efficient can usually get their term of service prolonged, if they wish it. In the ARMY RESERVE twenty drills per annum are required, these can be got over in twelve days. Should a soldier desire to leave the army he can do so on paying £10 within three months of enlistment. After the lapse of three months,

he has to pay £18. The MILITIA is a popular branch of the service. Many young men like the annual change, more especially as it is accompanied by the earning of two or three pounds. In the Artillery Militia, "growing lads" between seventeen and eighteen, of five feet five inches, are admitted, and men from eighteen to thirty-five, with five feet six inches in height, and thirty-three inches chest measurement. The time for which a recruit is liable to be called out varies. It is possible, we believe, for the Government to detain them for fifty-six days; but, as a rule, the annual training does not occupy a month. A militiaman, when out for his yearly training, has all his expenses paid him, and is provided with complete clothing, boots, soap, blacking, knife and fork, razor, brushes, and many other things. His railway fares, or other travelling expenses, are paid; and, during his drill and training periods, he receives hospital and medical attendance.

ARMY (Commissions in the).

In order to obtain a commission in the army the aspiring warrior is obliged to pass some very stiff examinations. On certain conditions he may escape the military examinations, he may either go in through what is known as "the back door to the army," the MILITIA, or he may work his way up from the ranks, or he may escape the regulation Sandhurst "Prelim." by having become either a Graduate in Arts of the Universities of Oxford, Cambridge, London, Edinburgh, Dublin, St. Andrews, Aberdeen, or the Royal University (Ireland). Those who have passed the "first examination" for the degrees of B.A., LL.B., B.S.C., or M.B. at the University of London, "Mods" at Oxford, the "Previous" or the "Little Go" at Cambridge, the final examination of the School of Engineering, Dublin, the second University examination in Arts or Engineering of the Royal University, Ireland, the first year's examination at Durham, the examination for candidates for the Army at Edinburgh, St. Andrews, Glasgow, and Aberdeen are also exempt. Four preliminary examinations are held during the year at London, Dublin, and Edinburgh. The fee is £1, and the subjects are mathematics, consisting of arithmetic up to and including vulgar and decimal fractions, proportion and simple interest, the first Book of Euclid, and Algebra up to and including

simple equations, translations and grammatical questions in French, German, or some other modern language, dictation in legible handwriting, elementary geometrical drawing, and geography. Those who are going in by the open competition have also to pass a "further examination," as it is called, which is also competitive. The fee for this examination is £1, and candidates for admission must send in their names to the Military Secretary, not later than the 15th of May for the July examination, or the 15th of October for the December. They must enclose a birth certificate, or the usual declaration of age before a magistrate by a parent or guardian, and a certificate of character from a school or tutor. The subjects for the further examination are divided into three classes, and candidates are obliged to take up three subjects in Class 1, and can, if they choose, add one subject in Class 1 or 2, and three subjects in Class 3. The Class 1 subjects are Latin (3,000), French (3,000), German (3,000), mathematics, Books i. to iv. and vi., Algebra up to and including the binomial theorem, the theory and the use of logarithms, and plain trigonometry up to and including the use of triangles, mensuration (3,000). In French or German 600 of the marks in each are given for colloquial knowledge. In Class 2 the subjects are Greek (2,000); English history, the papers of which are one general and one limited to a fixed period (2,000); higher mathematics, including analytical geometry and conic sections, differential calculus, statics and dynamics (2,000); science, of which a candidate is allowed to take up either: (1) the elements of inorganic chemistry, (2) elementary mechanism, hydrostatics and pneumatics, electricity and magnetism, (3) elementary mechanics, hydrostatics and pneumatics, light and heat (2,000); physical geography and geology (2,000). In the geographical and geological section there is a practical examination. Class 3, English (essay and précis writing) (500), freehand drawing (500), the elements of geometrical drawing (500). Candidates may have as many shots as they like at the preliminary examination; but the number of trials in the further examination must not exceed three for open competition candidates and others, and two for University candidates. The limits of age for open candidates and others are seventeen and twenty; for University students, seventeen and twenty-one; for University graduates seventeen and twenty-two. In the case of those desirous of obtaining WEST INDIAN

COMMISSIONS, the limit is twenty-four, but this does not apply to University candidates. About four months' notice is usually given before each examination, and competitors are also informed of the day and place, and the number of vacancies open to competition. Candidates are inspected by the Medical Board, and no candidate is considered eligible for a commission unless certified by the Board to be free from all bodily defects or ailments, and fitted in all respects for service. University graduates in want of information should address the Military Secretary. The various names of the Cadets are somewhat misleading. A brief explanation of the terms used in connection with them is necessary. QUEEN'S CADETS are invariably sons of officers of the Army, Navy, or Marines, who have died either in or from the effects of action, disease contracted on foreign service, or who have left their families in reduced circumstances. HONORARY QUEEN'S CADETS are almost identical with Queen's Cadets; but they have no pecuniary advantage. INDIAN CADETS are the sons of persons who have served in India in the Military or Civil Service, East India Company, or who have been nominated by the Secretary of State for India, in Council. The cost of education at Sandhurst is, for Queen's Cadets, nothing; for Indian Cadets, by special arrangement with the Indian office, nothing; for the son of an officer of the Navy, or Army, who has died on full pay, half pay, retired pay, or pension, and whose family is left in pecuniary distress, subject to the approval of the Secretary of State, £20 per annum; for the sons of all other deceased officers of the Army or Navy, of whatever rank, whose widows are, or would have been, if living, eligible for a pension, £40 a year; for the son of an officer below the substantive rank of Lieutenant-Colonel in the Army, and Captain or Commander in the Navy, or of an Instructor at the Royal Military Academy, or Royal Military College, or Staff College, £40 a year. For the son of a substantive Lieutenant-Colonel, or Colonel in the Army, or of a Captain or Commander in the Navy, or of a Professor at the Royal Military College, or Staff College, £60 a year. For the son of a General Officer, whose half pay or retired pay does not exceed £800 a year, or a Vice or Rear Admiral, £70 a year. For the son of an Admiral or General Officer whose half-pay exceeds £800 a year, or who is in receipt of an Indian Colonel's allowance, £80 a year. For the son of a private

gentleman, £125. Cadets—except Queen's and Indian Cadets—pay a further sum of £25 on entry, for uniform or books, and deposit £5 for petty expenses. Cadets are remunerated at the rate of three shillings a day. The course at Sandhurst occupies a year, and of this time the cadet is in residence some seven months. In order to secure a commission in the Royal Engineers, or the Royal Artillery, it is necessary to pass through the Royal Military Academy at Woolwich. To get into the Academy, candidates must undergo two examinations: a preliminary, the subjects of which are mathematics, arithmetic, and logarithms; Algebra, up to and including equations, permutations, progressions, combinations, and the binomial theorem; the first four and the sixth Books of Euclid, and plane trigonometry, including the solution of triangles; in languages, French, German, and Italian, or some other modern language, in papers consisting of grammatical and translation questions; English composition and dictation, with good hand-writing; geography, the elements of geometrical drawing, including the construction of plane scales and the use of simple mathematical instruments. The limits of age are from sixteen to eighteen, and candidates must be between those ages on the first of December for the winter examination, and the first of July for the summer examination. With the application for admission, which must be made before the fifteenth of October or the fifteenth of May, for the following examination, must be sent an extract from the register of birth, or a parental declaration before a magistrate of age, and a certificate of good conduct from the twelfth year of age. Three trials are allowed, and a physical examination must be undergone as for Sandhurst. The further examinations are held at the conclusion of the preliminary, and if a candidate passes he is allowed to compete. There are generally about 45 cadetships open to competition. With regard to this further examination we may say that the subjects and maximum marks are:—Mathematics, a severe examination upon further questions, and problems upon the subjects of the qualifying examination and the theory of equations, and analytical geometry, solid geometry, statics, conic sections, differential and integral calculus, and dynamics (4,000). In languages the candidate may select any one of the following:—Italian, Spanish, Russian, or Hindustanee, partly colloquial (2,000); French, written and colloquial

(2,000); German, written and colloquial (2,000); either chemistry and heat or electricity and magnetism (2,000); freehand drawing (1,000); general and physical geography and geology (2,000); English literature, limited to specified authors, and English history, limited to a fixed period (2,000); and either Latin or Greek or both (2,000 each). The fees for the two years at Woolwich are the same per annum as those at Sandhurst, as mentioned above; the pay of cadets is also the same. The first appointments to the ROYAL MARINE ARTILLERY, or "probationary lieutenantships," as they are more generally called, are awarded to the successful candidates at the open competition for admission to the Royal Military Academy at Woolwich, the details of which we have just mentioned. Only very few commissions are given annually. Candidates must be over 5 ft. 5 in. in height. Two examinations are also held at the Royal Naval College, Greenwich, and those who pass the first session examination successfully remain another session, and are examined for admission to H.M.S. *Excellent*, where they receive instructions in gunnery and torpedo practice. They then undergo an examination for a commission in the Royal Marine Artillery. Probationary lieutenants receive 5s 3d. a day, and when they have completed their course, 5s. 7d. a day. A deposit of £80 must be made to the Accountant General of the Navy before the appointment of a probationary lieutenant to the Royal Marine Artillery, and all candidates must produce a certificate that they are able to swim. Admission to the Royal Marine Light Infantry is awarded according to the number of vacancies to successful candidates at the open competition examination at Sandhurst, of which we have given particulars. The rules regarding University graduates are the same. Candidates must be 5 ft 5 in. in height and of the prescribed limits of age. Those successful are appointed lieutenants, and are posted on the list of their corps in the order in which they pass their examination, they immediately join their respective divisions, and are instructed in their drill and military duties for service ashore and afloat. A deposit of £80 must be made with the Accountant General of the Navy, and a certificate of ability to serve must be produced. The pay of a lieutenant of the Marine Light Infantry is the same as that of the Royal Marine Artillery—5s. 3d. a day for the first three years' service, 6s. 6d. a day for ten years, and after that 7s. 6d. a day. Another way of obtain-

ing admission to the Army is through the Militia. Any subaltern officer of a Militia Regiment is allowed to compete for an Army first appointment on passing certain technical and educational examinations, which are held twice a year by boards of officers under the Director-General of Military Education. Officers who are recommended as candidates must be between 19 and 21 on the 1st of January preceding the competitive military examination, must have served two annual trainings with the regiment to which they were appointed, and must have passed the examination required of a subaltern officer previous to the end of his second training, have completed a term of fifteen months' service in the Militia previous to the 15th of January and the 15th of July, prior to the March and September examinations, and have passed the preliminary examination which we will mention shortly. The Militia subaltern must be recommended by his commanding officer, and, with his application to the Military Secretary, must enclose a certificate of birth, or the usual declaration, a certificate of training, and the two official examination certificates. The subjects of the preliminary examination are: Mathematics—that is to say arithmetic, including vulgar and decimal fractions, proportion and simple interest, geometry (not beyond the first Book of Euclid), and Algebra, up to and including simple equations. There is in addition an examination in grammar and translation of French and German, or some other modern language, correct English, with good writing, elementary geometrical drawing and geography. The subjects of the competitive examination with the marks are :—Class 1 : Mathematics, up to and including the binomial theorem, logarithms, the first four and the sixth Books of Euclid, plane trigonometry, up to and including the use of triangles, mensuration (3,000) ; Latin (3,000); French, grammatical translation and colloquial (3,000); German, ditto (3,000). Class 2 : Greek (2,000); higher mathematics, including analytical geometry, conic sections, differential calculus, statics, and dynamics (2,000); English history, a general paper, and one limited to an announced fixed period (2,000); either the elements of inorganic chemistry, or elementary mechanics, hydrostatics and pneumatics, electricity and magnetism or elementary mechanics, heat and light (2,000); a practical examination in physical geography and geology (2,000). Class 3 : English composition, essay writing, and précis (500) ; freehand draw-

ing (500); the elements of geometrical drawing, with the construction of scales and the use of simple mathematical instruments (500). Of these, three subjects must be taken up in Class 1, and all the subjects in Class 3. The usual Civil Service "smattering" regulations are adopted to prevent "cram" candidates from passing. The regulations for University students are the same as the competitive examinations at Sandhurst.

ARMY SCHOOLMASTERS.

The pay of an Army Schoolmaster is 4s. 1d. a day, rising to 7s., with quarters, rations, fuel, &c. Candidates must be unmarried, at least 5 ft. 5 in. in height, and free from any physical defect. The only persons eligible are pupil teachers who have completed their apprenticeship, and certificated schoolmasters. After passing the competitive examination, they are required to undergo a course of training in the Normal and modern schools, Chelsea. Candidates should apply to the Director-General of Military Education, Winchester House, St. James-square, S.W. All the examination subjects are obligatory. The highest number of marks which can be earned is seven hundred; a minimum of three hundred and fifty in the aggregate is necessary for qualification.

ARTIFICIAL FLOWER MAKING.

It requires but comparatively little time to learn artificial flower making—about six or eight months for ordinary work. If a girl has a taste for the occupation she may earn as much as from twenty to thirty shilling per week; in good seasons an average worker earns as much as £1 a week regularly, but the employment is of an exceptionally uncertain nature. In times when artificial flowers are fashionable some of the best London houses employ a large staff. The hours are usually long. From 9 till 8 is not considered excessive. An hour is generally allowed for dinner and half an hour for tea. The Saturday half-holiday is customary in this trade. Summed up briefly the qualifications for success in this way to earn a living are a correct eye for detecting the peculiarities of flowers, a good eye for colour, neat fingers, and a talent for arrangement. Some London and provincial

houses take apprentices. The best method of obtaining information as to the state of the labour market is to call at one or two of the flower-making establishments, which are almost all situated in the neighbourhood of the Barbican.

ASSISTANT PURSERS (see Merchant Service).

ASSISTANT SURVEYOR OF TAXES (see Inland Revenue).

ASSISTANTS OF EXCISE (see Inland Revenue).

ATTENDANTS IN COUNTY LUNATIC ASYLUMS.

Nurses in lunatic asylums receive from £16 to £30 per annum. Their duties include cleaning the wards in the larger asylums, and assisting in the housework in the smaller. They have to help to dress and attend on the patients all day, waiting on them at meals, and walking out with them. Their hours of work are from 6 in the morning till 8 in the evening. Once a week they have a day off. CHARGE ATTENDANTS have the superintendence of a department or ward. They receive from £20 to £30 per annum. DEPUTY MATRONS, SUPERINTENDENTS OF LAUNDRIES, and HOUSEKEEPERS receive from £50 to £80 per year. Matrons who are at the head of the nursing staff and of the housekeeping in each asylum receive from £60 to £200 per annum. In public asylums, in addition to the above salaries, the nurses, charge attendants, infirmary attendants, and head attendants all receive their uniforms: those who fill the other positions wear ordinary ladies' dress. All have board, lodging, and washing found. At a number of public asylums pensions are granted on the completion of fifty years of age, and after a service of not less than fifteen years in a single asylum. These pensions are granted at the rate of one-fortieth of the annual pay. Emoluments are also given for each year of service. Thus a head attendant incapacitated for work who has received £40 a year, her dress valued at £5, and lodging at £25, and has served fifteen years, would be entitled to about £26 per annum for the rest of her life.

BAKER (see Shopkeeping).

BALLET DANCERS.

Ballet dancers receive their training at schools of dancing, where they undergo courses of instruction according to talent. They begin when mere babies, and are generally employed in some active work during their apprenticeship, as, for instance, in the annual pantomime, or in plays where a large number of dancers appear upon the stage. The average earnings of a ballet dancer begin with a few shillings a week, and rising according to talent to £2 2s. To the "stars" of the profession, as to leading actresses, large sums of money are paid for each performance, and the limit of their income cannot be fixed. Madam Katti Lanner trains dancers. Her address can always be obtained by applying at Covent Garden or Drury Lane Theatres.

BANK CLERKS.

For employment in a joint-stock bank application should be made to a director. In private firms the principal clerks have a great deal to do with the nominations of new members, though all candidates have to be referred to the head of the house. The rule of seeking the interest of a director applies also to the Bank of England. Clerks are admitted at about the age of 17 up to 24 in the Bank of England, and 21 in most others. It is desirable that they should have been in a situation in which they have had facilities for gaining some little insight into business before going into a bank itself. The salaries commence at from £50 to £70 per annum, and rise by a slow but steady increment until a maximum of from £250 to £300 is reached. Thence promotion is almost entirely by seniority. Some of the principal situations of the different departments are filled by such clerks as the directors think best qualified. The first and chief requisite of a bank clerk is a knowledge of arithmetic. He should be quick and accurate, especially in the addition of money. Every clerk on entering has to find surety for an amount varying with the responsible nature of his employment. This is to meet any losses he may incur from his mistakes or from the fraud of others. Clerks in the Bank of England can retire after a certain number of years' service on a moderate pension. In case of illness their salary is

continued, and also during absence on leave. In most banks, as a rule, every assistance is rendered in times of sickness or in cases of death, and either an allowance or a good sum of money is awarded to widows of employés.

BARMAIDS.

The occupation of a barmaid is not one which can be recommended. In London the Young Women's Christian Association have done their best to assist barmaids and restaurant girls by opening a sort of club for them at 14, John-street, Bedford-row, W.C. A trifling charge is made for the use of the rooms and classes. These last are for instruction in French, music, singing, writing, and arithmetic. The annual subscription is 1s. 6d., which affords the use of the library, drawing-rooms, and gives admittance to the concerts and other gatherings. Situations as barmaids can generally be obtained from advertisements in local daily papers or from *The Licensed Victuallers' Gazette*. One or two references as to character are necessary, and the girl, who should be over eighteen years of age, must be able to write decently and to keep accounts. Beginners have to "give time," as it is called. This may be either one or two months, and in some cases more. During this period she receives her board and lodging, but no wages. At the end of the time she receives either notice to go or an invitation to stay. The wages are small—generally from 7s. to 14s. per week. The hours are long, and the work arduous.

BEE-KEEPING.

This is a charming and fairly profitable method of increasing the incomes of ladies of limited means residing in the country. We are informed by bee-keepers that by the adoption of careful and modern methods, bees can be made to pay, and pay well. Bees require comparatively little food and attention. It has been estimated that from £1 to £2 per hive per annum may be earned. We would advise all who propose taking up this interesting pursuit to first carefully study one of the excellent hand-books on the subject which exist. Information on the keeping of bees appears from time to time in the columns of *The Exchange and Mart*.

BENGAL PILOT SERVICE, THE

We have been informed that openings for bright youths frequently occur in this service, and we therefore give prominence to it. The following are the official regulations :—(1) Candidates must be not less than 15, and not more than 18 years of age ; (2) Every candidate must produce a medical certificate of good health and fitness to work as a pilot in a tropical climate, and also a certificate of good character ; (3) Each selected candidate will receive a second-class passage to Calcutta, and an allowance of £20 for outfit ; (4) Each "leadsman's" apprentice, on arriving at Calcutta, will report himself to the Master Attendant, and will receive 100 rs. per month from the date of his arrival to enable him to support himself in Calcutta, and to pay his mess money when on board the pilot brigs ; (5) He will have to serve for two years as a leadsman, and then to pass an examination as second mate of a pilot brig for one year, during which time he will receive 125 rs. per month, and for another year as a leadsman, during which time he will receive 100 rs. per month and 50 per cent. of the "lead" money paid by the ships in which he does duty ; (6) He will then be required to pass an examination as first mate, and will have to serve another year as first mate of a brig, after which he will be allowed to go up for an examination as a mate pilot ; (7) After passing this examination, leadsmen apprentices will be promoted to the grade of mate pilot as vacancies occur ; (8) After from four years' service as mate pilots, pilots will be permitted to go up for an examination as master pilots, and, on passing examination, they will be promoted to be master pilots as vacancies occur in that grade ; (9) Vacancies which occur in the grade of branch pilots will be filled up by promotion from the master pilots' grade ; (10) Members of the pilot service, who enter the service under these rules, are not entitled to any salary while on duty. They receive, as their remuneration, 50 per cent. of the pilotage dues paid by the ships piloted by them. They are entitled to allowances while on leave, and to pensions on retirement from the service. The average earnings of each grade, calculated upon this principle, are as follow :—Mate pilot, about 450 rs. per month ; master ditto, 700 rs. per month ; branch ditto, 900 rs. per month. Pilots receive pensions from Government, and no pension subscriptions are required from them.

They are also permitted to subscribe on liberal terms for pensions for their widows and orphans. Applications for further particulars should be addressed to the Master Attendant, Bengal Pilot Service, Calcutta.

BOARDING-HOUSE KEEPING.

We cannot recommend this popular but, very frequently, unremunerative method of obtaining employment to ladies. It is terribly overcrowded. The business of buying and selling establishments of this description is infested by sharks of a more than usually unscrupulous kind, and if anyone definitely intends becoming a boarding-house keeper, it will be best to place the matter in the hands of a trusted solicitor, who will see that proper books of account have been kept, and who will refuse to pay any considerable part of the purchase money "down," until the amount of custom has been tested by actual experience. We are informed that in London ,during the past two or three years, a large number of boarding-houses have been parted with, owing to the fact that the new mammoth hotels offer accommodation at a price with which the unfortunate boarding-house keeper has not been able to cope. In promoting a boarding-house, we would suggest that the starter had best get some practical insight into the work at a high-class establishment of the kind, and then wait until a favourable opportunity offered itself. Advertisements of "magnificent opportunities" should be let severely alone. The following suggestion has been made:—"It would pay a lady well, provided she had a small private income and some furniture, to take a house in one of the small towns or villages on the direct Portsmouth line, London and South Western Railway, or London, Brighton and South Coast. From May to October every available room is rented, at a good price, by families from Brighton. Midhurst, for example, is filled with artists on account of the picturesque nature of its surroundings, and rooms there, which a few years ago were let for twelve shillings a week, now command three guineas. A lady not afraid of work—and a house full of young people always makes a good deal—could secure a fair income either by taking boarders or letting her rooms during the summer months; and she could considerably augment her profit by keeping bees (see Bee-Keeping), or fowls (see Poultry-

Keeping), should she have sufficient garden for the latter. If she had more eggs or fowls than she wanted for her own immediate use, she could always dispose of them at the nearest town."

BOOKBINDERS AND FOLDERS.

This occupation, so far as it refers to periodicals, has now become entirely the work of women. It is rare to find men employed in any of the following branches of the work:—Folding, collating, sewing, covering, laying on gold, hand binding, and the numerous other sections of the business. In London, and in Edinburgh also, much of the work of the leading publishers is taken home by women, who are often assisted by members of their families. Apprenticeship is thus often dispensed with, but in many houses a sort of apprenticeship is required. Girls can commence as early as thirteen or fourteen. The work is mostly given out on "piece." The rates per 100 sheets for folding are usually 1d. The work is as good as any which uneducated women can engage in. Apprentices to bookbinding firms are taken at the age of 15 upwards. Premiums, £5 to £20.

BRASSFOUNDING.

This is a branch of work which gives employment to an immense number of mechanics. It is clean and comparatively light, but injurious to health. Fumes of oxide of zinc are given off, filling the air with a fine white powder, and producing what is known as "brass ague." The average weekly wages are at present:—Casters, 40s.; moulders, 36s. to 40s.; fitters, 26s. to 32s.; chasers, 30s. to 40s.; millers, 30s.; pattern-makers, modellers, and designers, 30s. to 100s. The work has recently been opened to women, who now do polishing, lacquering, burnishing, bronzing, dipping, and wrapping up.

BRICK-MAKING.

With respect to wages, brick-making during the season is decidedly remunerative. The moulder usually works under an agreement for a yearly hiring, and he hires a gang under him, the members of which are paid so much per 1,000. The average weekly earnings of Southern brickyards are:—Moulders. 27s.; sorters and loaders, 25s.; barrow men, 18s.

to 21s. When the brick market is high, the moulder makes very "good money," and an instance is recorded where a man and his family made as much as £8 between them.

BRITISH MUSEUM (Appointments in the).

The British Museum employs a very large staff of assistants of various kinds. Nominations and appointments to permanent situations in the Museum are made exclusively by the three Principal Trustees, the Archbishop of Canterbury, the Lord Chancellor, and the Speaker of the House of Commons. On the candidate obtaining authority from one of the Principal Trustees, he will be allowed to fill up, in the Principal Librarian's Office, a form of application for nomination to an appointment, to be accompanied by testimonials. The examinations which candidates are required to undergo are as follow :—Assistants : The limits of age are 18 to 30 years. The qualifications must be writing from dictation, orthography, arithmetic, including vulgar and decimal fractions, English composition, précis writing, geography, English history from the Conquest to the end of the eighteenth century (or, as an alternative, Euclid or Algebra), translation from one ancient and one modern language, and any other subject or subjects which the Trustees may prescribe for the particular department in which the vacancy has occurred. The examinations are competitive, at least three candidates being nominated for each vacancy. The examination fee, to be paid to the Civil Service Commissioners before each examination, is £4. The appointments are probationary, and are submitted for confirmation at the end of the first year of service. The salary of second-class assistants is £120, rising to £240 by annual increments of £10 ; first-class assistants (filled usually by promotion from the second-class), £250 to £450, by an annual increment of £15. Attendants : The limits of age of attendants are 18 to 30 years. The qualifications are writing from dictation in a clear hand and the two first rules of arithmetic. The examination fee is 2s. 6d., to be paid to the Civil Service Commissioners. The salary is—For second-class attendants, £60 to £100, rising by annual increments of £4 ; for first-class assistants (filled annually by promotion from the second-class), £105 to £120, by annual increments of £5. Candidates are required to satisfy the Civil Service Commissioners

that they are free from any physical defect or disease which would be likely to interfere with the proper discharge of their duties, and that their character is such as to qualify them for public employment.

BUTCHER (see Shopkeeping).

CADETSHIPS (Eastern).

Cadetships must not be confounded with Interpreterships. A Cadet must be a natural-born British subject, and between the ages of twenty-one and twenty-four on the 1st of August in the year in which his examination is held. As the examination generally takes place in that month, it may be said, therefore, that the Cadet must be between those ages at the time of examination. There is a preliminary examination in orthography, handwriting, and arithmetic up to and including vulgar and decimal fractions. And before entering for the competitive examination, a candidate must show that he is competent to pass these. In the competitive examination, the subjects are Latin, English composition, including précis writing, and French, German, Greek (ancient), and Italian. These are all obligatory ; the optional subjects are modern geography, and ancient and modern history, pure mathematics—that is to say, Euclid, Books one to four and six, Algebra up to and including the binomial theorem, trigonometry, including the solution of triangles, analytical geometry (elementary), mixed mathematics, including statics and dynamics, treated with the differential calculus, the elements of constitutional and international law, and political economy, geology, civil engineering and surveying, and any two of the languages given in the obligatory subjects which have not been taken up as obligatory. The marks awarded are :—Latin, 300 ; Greek, 300 ; French, 300 ; English composition, 200 : précis writing, 200 ; pure mathematics, 350 ; mixed mathematics, 250 ; modern geography, 200 ; modern history, 200 ; ancient history, 200 ; constitutional law, 200 ; international law, 200 ; political economy, 200 ; Italian, 300. The Cadets go to either the STRAITS SETTLEMENTS, HONG KONG, or CEYLON. When they arrive at the various colonies they must proceed at once to learn one ofthe native languages, or the method of transacting Government business. The CEYLON CADETS begin with three hundred a year

(from this must be deducted a considerable amount, owing to the depreciation of silver) and a free passage out. A Ceylon Cadet has as well an allowance for the payment of a "pundit," for the purpose of assisting him with his studies. These pundits are educated men, holding a certificate from the board of examiners. Hong Kong Cadets remain in England for one year after passing the examination, and must learn Chinese at King's College or at University College; and they also attend at the Colonial Office each day, in order to receive instruction in the routine of the establishment. While in this country the Cadet receives salary at the rate of a hundred pounds a year, and two hundred and thirty pounds a year on his arrival at Hong Kong. In addition he has a passage out paid, and half salary from the time of examination. Government is particularly kind to the Cadet. After he arrives at Hong Kong he continues his Chinese studies and is provided with rooms, teachers, and books. After he is a skilled master of Chinese he receives the liberal salary of £300 a year. Strict attention must, however, be given to discipline and educational progress. Examinations are held every six months and should the Cadet misbehave himself, he can be summarily dismissed. The STRAITS SETTLEMENTS CADETS leave England two months after passing the examination, unless they are required to study Chinese. Their salary and regulations are the same as those of the Hong Kong Cadets.

CAPE MOUNTED POLICE.

Recruiting for this and other Cape Colonial forces no longer exists in this country, as vacancies in them are filled by young men residing in Cape Colony.

CARETAKERS.

Many heads of families in the middle and upper classes, leaving town for the summer, are at a loss to know what to do with the house, as to leave it entirely in charge of the servant or servants is not altogether satisfactory. Ladies in reduced circumstances, and who are not young enough to commence training for any profession, would do well to advertise their willingness to take charge of houses during the absence of the family. It would benefit both employer

and employed. Many an overworked mother would enjoy her holiday to a far greater extent if she knew her house was in good hands during her absence.

CARE OF THE INSANE.

There is a good opening for persons of either sex willing to take charge of private patients under the superintendence of a medical man. These patients pay from £100 to £1,000 per annum, according to the accommodation, horses and carriages, clothing, &c., which may be required to be provided. Assistants, in high-class asylums, especially private ones, might, if qualified, obtain such a patient through some doctor cognisant of their qualifications. Many suburban and country doctors receive insane patients as "inmates."

CARPENTERS AND JOINERS.

Carpenters and joiners serve an apprenticeship of six or seven years. With indoor apprentices a premium is paid. As soon as they become useful they receive wages, about 5s. or 6s. at first, and rise 2s. a year till they are out of their time. Journeymen are paid by the hour, eightpence is the usual sum, but sometimes they can command ninepence. They have to find their own tools and it is consequently a very important matter for apprentices in the later years of their time to be collecting as complete a set as they can. A carpenter and joiner should be acquainted with the various kinds of woods, he should also have some knowledge of drawing, to be able to calculate how much wood of different sorts has been used in a piece of furniture, what it costs at the prices charged for the varieties, and how much labour has been spent in making it. A man who is ready with his head as well as skilful with his hands, is almost certain of constant employment, and is sure to receive higher wages than a man who can work with his hands only. Many excellent mechanics have raised themselves from the joiner's bench. Tredgold, the scientific writer, served his apprenticeship to a carpenter, and worked for many years as a journeyman. He employed his leisure in studying mechanics, mathematics, and such subjects, and so became a great and useful man. The number of hands in large cabinet-making and furnishing establishments is very considerable. Not only are the

workshops well provided with joiners, cabinet-makers, and turners, but also with upholsterers and cutters-out, who earn from 30s. to 35s. weekly, and workwomen, stuffing, tacking on, or sewing on the covers of chairs, sofas, &c., at 12s. to 15s. a week. Indeed, it is no uncommon occurrence for the entire furniture of royal palaces and yachts to be ordered from one of these firms by the courts of foreign potentates in every corner of the world. To execute with certainty and promptitude orders such as these, the command of first-class hands must be abundant. PAINTERS, GILDERS, CARPENTERS, PAPERERS, and a miscellaneous assistant staff are required to pioneer the way for the more costly work, or to make all good behind it. Some of the larger firms employ from 600 to 1,000 hands, according to the time of year, or the pressure of orders, and pay out nearly £2,000 per week as wages. One large house employs from 150 to 200 hands on cabinet making and joinery alone.

CHEMICALS.

The spread of chemical and scientific knowledge is daily causing the adoption of new processes and applications, which frequently develop a trade in an unexpected direction. It is to the increase of our chemical knowledge that our superiority in metallurgy, as well as in the more delicate operations of industrial art, is owing, and we cannot therefore overrate the value of our chemical manufactures. Chemical manufactures comprise those of sulphuric acid, hydrochloric acid, bleaching powder, nitric and carbolic acids, sulphates, and a number of other minor chemical compounds. The trade is chiefly carried on on the Thames, at Runcorn and Widnes, in Lancashire, and in Durham, and much skilled labour is employed. The average weekly earnings are, for sulphuric acid makers 28s., sulphate of soda makers 33s., crude soda makers 28s., caustic soda makers 28s., carbonate of soda makers 31s., crystals of soda makers 26s., bi-carbonate of soda makers 26s., bleaching powder makers 35s., labourers 21s. to 25s., foremen 35s. to 40s., carpenters 9d. per hour, filters 8½d. per hour, hokers 37s. 6d. per week, assistant chemists £150 to £400.

CHEMISTS (MALE AND FEMALE).

For those possessing some capital, and who are not above keeping a shop, there can scarcely be found a more profitable

opportunity of investing their money than as chemists. The Pharmaceutical Society has thrown open its examinations to women; there is nothing to prevent them setting up in business as chemists. The training may commence as soon as a boy or girl leaves school; the preliminary education should have been such as to enable the candidate to pass the local examinations of one of the Universities. The chief requirements are English, Latin, and arithmetic. A three years' apprenticeship at college or at a practising chemist's is then entered upon, the expenses of which vary from £50 to £150 a year. Mrs. Weir, who, as Miss Isabella Clark, opened a chemist's shop and dispensary at Spring-street, Paddington, eleven years ago, receives lady outdoor apprentices for three years, at a premium of £100. Her address is 7, Bruton-street, Berkeley-square. The fee for attending the daily lectures given at the Pharmaceutical Society, 17, Bloomsbury-square, W.C., is four guineas. The South London School of Pharmacy, 325, Kennington-road, admits women to their lectures and also the laboratory; fees for one year's training, £15. The Pharmaceutical Society in Ireland is also open to women, and classes in preparation for its matriculation examination are at work at the Queen's Institute, 25, Molesworth-street, Dublin. Before presenting themselves for examination, candidates must prove that they have been for three years practically engaged in the translation and dispensing of prescriptions. The theoretical and practical studies made during apprenticeship are generally sufficient to enable one to pass the examinations, upon which the qualified pupil is free to open an establishment on her own account, or become assistant to another chemist. The capital required to start in business is from £700 to £1,000. Some of Mrs. Weir's apprentices are now doing well in various places.

CHINA PAINTERS.

Messrs. Doulton employ about three hundred women at their art pottery in Lambeth. To be eligible for admittance, a girl must have passed the elementary examinations in an art school and to be at least thirteen years of age. The payment is at first very low, beginning at 3s. to 4s. per week, and rising according to merit. The average weekly earnings of a good, steady worker are from 20s. to 25s.; but there are cases where women earn as much as four and five guineas a

week. The payment is raised by 1s. a week for every South Kensington examination passed; and the hours of work, which are generally from nine to five, are shortened for students as an encouragement to continue their art studies. Lectures on art are held regularly in the lecture-rooms on the premises. Besides this, there is a valuable collection of reference books and figures, and parts of the human body are kept for students of anatomy. In the china factories at Derby, Worcester, Coalport, and Stoke-upon-Trent, painters, enamellers, banders, liners, spriggers, and face painters serve an apprenticeship of seven years—from 14 to 21. They commence at 2s. per week, and rise sixpence the first three years. At the end of this time they are paid by the piece, receiving half the value of their work. When they have "served their time," they become journeywomen, and earn 20s. a week. Gilders earn 27s.; burnishers and chasers, 18s. The superintendent of the apprentices receives £1 per week. The hours are from eight to six, with half an hour for breakfast and an hour for dinner. Women are also employed in the coarser work requiring mere labour. Those who act as attendants to the men, such as baller and turner to the thrower, lathe-treader to the turner, and cup-makers' spongers, earn from 8s. to 14s. per week. Women who work in clay on their own account, as for example, flower malers and jollyers, average from 8s. to 12s. per week. Warehousewomens' wages are from 8s. to 12s. a week. The transferrers have a trade of their own. As soon as a child leaves school, she will begin as a cutter, and earns from 2s. to 3s. a week. Her work is to cut out the printed paper patterns, and hand them to the girls who transfer them to the ware. In time she becomes a transferrer herself, and, as a journeywoman, makes from 10s. to 16s. a week.

CHINESE CUSTOM SERVICE, THE.

Nominations for the Chinese Custom Service are solely in the gift of the Inspector-General of Customs at Pekin. Applicants for a nomination should address a letter to the Inspector-General, under cover to the Secretary of Chinese Maritime Customs, 8, Storey's-gate, S.W., stating, first, the circumstances under which the application is made; second, the qualifications of the candidate for employment in the Customs Service; third, the nature and extent of the candi-

date's education; fourth, the social position of the candidate's family. A photograph of the applicant should be enclosed, and also two or three letters or certificates bearing upon the four points above referred to. The limits for admission to the service are nineteen and twenty-three. Every nominee must undergo a medical examination. Good looks, strong physique, and pleasing manners, with wideness of tact, temper, and judgment, are as much considered as mental acquirements. There is a preliminary test examination in handwriting, dictation, spelling, grammar, punctuation, and composition. Those who are successful in passing this are entitled to compete in the final examination, in which their relative merits, in respect of educational knowledge, general intelligence, and future promise are ascertained. The obligatory subjects of the final are English language, modern history, geography, précis, classical or foreign terms are of frequent occurrence, and two at least of the following: mathematics, modern languages, natural science. A thorough knowledge of a few subjects is held of greater account than a superficial of many. Every candidate who receives an appointment is allowed £200 for his passage money. On arrival at Shanghai he will receive a salary at the rate of £300 per annum, and unfurnished quarters, or an allowance in lieu thereof.

CHRISTMAS CARD MAKING.

This is an industry which gives employment to a large number of ladies. It is unfortunate that a number of "sharks" have made use of the knowledge of the fact by issuing misleading advertisements which induce ladies to send in money and work, in the hope of obtaining permanent employment. This system of swindling has been so thoroughly shown up that it is wonderful that it is so extensively carried on still. Rimmel, the perfumer, of 36, Strand, gives orders to a number of ladies for the making and painting of cards, fans, and valentines, and other work of the kind. The work is of the highest class, and the pay is naturally good. Many of the ladies who work for him regularly make as much as £3 or £4 a week. Among the other firms who give work to ladies are Messrs. Holford, New Oxford-street, who will give employment to ladies of talent. The work is said to be very mechanical, and consists in copying from other designs, the chief requisites being neat-

ness and care. In all work of this kind the pay depends upon the industry of the worker. The artists are paid by the dozen. Messrs. Ryde, of Western-road, Brighton, give out similar work to ladies. Original designs may always be disposed of to such firms as Raphael Tuck, Hildesheimer, Marcus Ward, or any publisher of Christmas and birthday cards, while an original fan might find a purchaser in Mr. Rimmel.

CHURCH, THE.

In a work of this kind the religious bodies must naturally be regarded from a professional standpoint. Moral fitness having been ascertained by self-examination, the aspirant must determine as to the manner in which he proposes to get into the Church. Speaking of it as a profession, the Church is one of the widest of all. Connected with it are many of the highest branches of education. Most of the professors at our Universities, the masters in our schools, and numbers of secretaries of religious and other bodies are qualified priests. In order to become a clergyman, it is almost absolutely necessary to obtain a University degree, although it is not requisite (as is popularly understood) that that degree should have been granted by either Oxford or Cambridge. The necessary training in theology is given by other institutions besides Universities, and candidates can be qualified by these as efficiently as by what are understood to be the leading establishments. Among the examinations which will assist in qualifying, we may mention the Cambridge preliminary examinations. These are held every Easter and every October, in various parts of the country. In addition to graduates of the Universities, members of any Church of England theological college and candidates nominated by any bishop for ordination within their own diocese can enter. The leading theological colleges (we do not include Universities) are:—St. Augustine's, Canterbury; St. Aidan's, Birkenhead; the theological colleges of Chichester, Cuddesden, Dorchester (for foreign missions), Ely, Gloucester, Lichfield, Salisbury, St. Bees, Truro, Wells, Leeds Clergy School, Lincoln Cancellarii, and the London College of Divinity. The fees for tuition at the above vary from 30 to 40 guineas per annum. In most of them there is accommodation for resident students on moderate terms. There is usually an entrance fee of from 1 to 2 guineas, and exhibi-

tions and scholarships open to most comers are to be found at each. Among other clerical training establishments, the Clergy Training School at Cambridge may be mentioned. It provides a special course of preparation for the preliminary examination. Lectures are given by fellows of the college on theological and other necessary subjects. The entrance fee for the preliminary is 25s. In this examination certificates are issued to the successful candidates, and their names are supplied to the bishops of every diocese. Particulars may be obtained from the Rev. E. S. King, Madingly Vicarage, Cambridge, Secretary of the Council. The Universities of Oxford, Cambridge, and Durham confer two divinity degrees, those of Bachelor and Doctor. Candidates for the D.D. at Oxford must be priests of the Church of England, and Masters of Arts of not less than three years' standing. The fee on taking this degree is £14. Candidates for D.D. Oxford must be B.D.'s of not less than four years' standing. At Cambridge, candidates for B.D. degrees must be Masters of Arts of not less than seven years' standing, and for D.D. they must be B.D.'s of not less than five years'. The fees vary according to circumstances, and are from about £4 to £16. At Durham, the fee for the B.D. degree is £6; for the D.D., £10. When the requisite college course has been completed, the candidate for orders will present himself for ordination. The times, conditions, and circumstances vary in the different dioceses. There are generally two, three, or four annually; it is understood, however, that ordinations are always held at Trinity and Advent. It must not be forgotten that notice of ordination has to be given to the bishop or his chaplain from two to five months beforehand, and usually the following testimonials must be produced :—(1) Certificate of baptism, (2) college testimonials, (3) testimonials from three beneficed clergymen as to character and fitness, (4) a document known as "*Si Quis*," which is a sort of testimonial from laymen who have personal knowledge of the general character of the candidate. It is the usual practice also to be nominated to a curacy, the ordained minister almost invariably serving in this capacity for at least a year before taking other duty. Exception is occasionally made in the case of Fellows of Colleges, who are occasionally nominated at once to college livings, without previous parochial experience. When ordained, the candidate is also required to subscribe his

assent to the doctrines of the Common Prayer Book and the Thirty-nine Articles. The limits of age for admission to deacon's orders is not under 23, to priest's orders not under 24. There are authorised forms for all the above-mentioned certificates, &c., and detailed information respecting the ordinations in every diocese can be found in *The Official Year Book* of the Church of England; also forms of nominations for curacies, presentation to benefices, &c. As regards appointment to parochial duty, the patronage of Church livings is at present various in England, being for the most part in the hands of the lay owners of the land. In such cases the patron's candidate is "presented" by him to the bishop of the diocese. The system is not considered satisfactory in many respects, and is likely to be modified before long. "Plurality," or the holding of more than one church living at a time, is practically abolished, as under the present law no two benefices can be held together, if they are more than three miles apart by the nearest road, and then not unless one of them is under £100 annual value. On being presented to a living, the candidate has to sign the declaration of assent already mentioned, the oath of allegiance to the sovereign, and that of obedience to the bishop by whom he is then instituted and inducted. The ceremony of induction usually includes the ancient form of the inductor placing the candidate's hand upon the key of the church door, after which he enters the church alone, and, being locked in, tolls the bell for a given time. "Reading in" takes place at the first Sunday's service conducted by the new incumbent, and includes the reading of the Assent and Thirty-nine Articles. It is generally assumed that, when once admitted to the ministry, a clergyman can never again withdraw from it. This is not strictly the case at the present time, as clergymen can now execute what is called a "Deed of Relinquishment," by which they become laymen again in the eyes of the law, and are free to engage in any other occupation or profession, though they can never again, under any circumstances, officiate as clergy. This, of course, is distinct from the "Deed of Resignation," which is required on giving up or exchanging a living. From the point of view of a livelihood, it is unfortunately too well known that the Church is far from being a lucrative profession, though, like others, it has its so-called "prizes." Much, however, is being gradually done towards improving the position of the worst paid branches,

whether by assistance from such institutions as the "Parochial Aid" or the "Additional Curates'" Societies, or by re-adjustment of the incomes of livings by the Ecclesiastical Commissioners. Although the profession is not in the nature of things a channel for realising fortunes, yet industry meets its reward as elsewhere; and there is no reason why the clergyman's leisure time should not be profitably employed in a material as well as a moral sense. The pursuits of tuition or literature are always open to him, and, as in every kind of occupation, much depends on the method and the faculty of using time to the best advantage. The incomes of livings are for the most part derived from tithes, or rather, the rent charge by which these are now represented; from the revenue of glebe lands, whether let or farmed by the incumbent on his own account; from perpetual annuities, or from voluntary or "customary" fees and offerings in connection with the church services. This also represents a somewhat unsatisfactory state of things, the incomes dependent on some of these sources being often fluctuating and sometimes extremely precarious. Without any unbecoming regard for temporal advantages, the clergyman is no loser by possessing prudence and thrift, and will exercise these talents well in considering the sources of income of any preferment which may be offered to him, and prospects held out by it. In the above remarks we have referred exclusively to the Church of England, and the training for its service in this country. The general system is similar, though, of course varied in detail, as regards the organisation of the "Church of England" in Wales and Ireland, the Episcopal Protestant Church in Scotland, and the Church in the Colonies. The like courses of training and instruction are supplied by the Welsh, Scotch, and Irish Universities. The Church work in the Colonies and dependencies, especially that which relates to missions, is the subject of special training at home. The established Colonies—such as India, Canada, and the Australian Colonies—are now to a great extent training their own clergy, and such openings accordingly become less frequent for candidates from home, excepting for appointments of the highest class. In regard to foreign mission work, appointments under the various societies are paid on much the same scale as the average at home, and for the most part the general advice we offer to emigrants of every kind is applicable.

CIGAR MANUFACTURE.

The best cigars are made by men, who sometimes earn as much as £3 per week; but the average rate of men's wages may be taken at 25s. Tobacco cutters make from 28s. to 30s. weekly. A skilful spinner will occasionally make from 50s. to £3; but this is rare. Including men and women the number of tobacco workers in England is estimated at between 7,000 and 8,000, without counting the hundreds of clerks, counter-men, carmen, packers, and others, who are necessary to the work of the factories, or the thousands who are indirectly engaged in the same branch of industry.

CIGARETTE MAKING (See Tobacco Strippers).

CIRCUS RIDERS.

Training usually commences very early. The principal requisites are grace, agility, and fearlessness. Size and form have not so much to do with making a successful rider as one would suppose. The athletic exercises require vigour and firmness of muscle, and the training should begin in early childhood. An ordinary equestrian receives about £4 a week, but a "star" will receive as much as £100. See Actors and Actresses.

"CITY," THE.

In all the great mercantile houses there are two kinds of clerks—one with whom a sum is paid in order that he may become acquainted with the details of the office, with the view of one day setting up in business for himself; the other, the salaried clerks who do the ordinary work. We will here deal with the former, as pertaining to merchants and brokers. The premium required varies according to the standing of the house. With some it is as much as £500, and full services in addition. Articled clerks are expected to conform to the rules of the office; there should be no distinction made between the two classes, beyond the fact that the principals feel it incumbent upon them to show the pupil clerks the whole course of the business, whereas their paid clerks are supposed to be able to do their work without any instruction. A young man who wishes himself to become a principal will not think any work too trouble-

some or menial; his aim should be to learn everything, so that one day he may know how to direct others. The time of apprenticeship varies from one to three years; but sometimes a young man after spending twelve months in one office will spend a second year in another, so as to gain an insight into two branches of the same business. When this happens a special arrangement is made and the premium is reduced. See Commercial Clerks.

CIVIL SERVICE (BOY) CLERKSHIPS.

It is almost impossible to deal in full with the Civil Service in a work of this kind. It devolves upon us therefore to summarise in as practical a fashion as is consistent with the giving of good and useful information. The greater part of the appointments offered to the young men and women of the country by the Civil Service Commissioners have been, since the regulations of 1885 were issued, open to all. In the majority of instances it is possible for anyone to obtain a good and remunerative situation by the exercise of his own or her own talent and knowledge. Beginning with the lowest and easiest branch, we will take the BOY CLERKSHIPS. The boy clerk starts with a salary of 14s. per week. Every year he gets a rise of a shilling. He cannot, however, go on for ever at this rate, for at the age of 19 he must either qualify for a higher branch or leave the Service. It is easy to pass examinations in the meantime which will enable the aspirant to make good progress. At present the competition is severe, there is an average of four candidates for each berth. This is likely to increase rather than decrease. The advantage attaching to this branch of the Service is that the boy clerk escapes the preliminary examination, which meets every other candidate at the outset of his career. The limits of age are from fifteen to seventeen. After two years the boy can compete for the Men's Clerkships Department. A number of vacancies are reserved for those boys who qualify. In a recent examination the number of those who were rejected in the boys' clerk division was exactly one half of the entrants. Of those who entered that is to say, more than half failed to obtain the requisite number of marks. The maximum for arithmetic was 300; for compound division, 100; for orthography, 400; for handwriting, 400; for copying manuscript, 200; for English

composition, 200; for geography, 200; the total being 1,800 marks. Of these the most successful candidate gained 280 in arithmetic, 92 in addition, 390 in orthography, 315 in handwriting, 121 in copying manuscripts, 145 in English composition, 166 in geography. He gained altogether more than 1,500 marks out of the 1,800. The majority of those who fail in this are "stumped" in dictation. So many young fellows think that their spelling is perfect, and do not endeavour to improve it, that they leave the study of this important matter until the last moment, hoping that a little exertion will safely carry them through. Here is a specimen of the dictation given at a recent examination: "On the fourth day of Alexander's southward march, his advance guard reported that a body of mounted cavalry was in sight. He instantly formed his troops for battle, and directed them to advance steadily. He rode forward at the head of some squadrons of cavalry, and charged the horse whom he found before him. This was a mere reconnoitring party, and they broke and fled immediately. But his troops made some prisoners, and from them Alexander found that the Persian monarch was posted only a few miles off, and learned the strength of the army that he had with him. On receiving this news Alexander halted, and gave his men repose for four days, so that they should go into action fresh and vigorous. He also fortified his camp, intending to advance upon the enemy with the serviceable part of his army perfectly unencumbered. After this halt he moved forward while it was yet dark, with the intention of routing the enemy and attacking them at break of day." Looking over the foregoing, we do not see many words that could not be spelled by those of an ordinary education. The only difficult word is "reconnoitring," which, given in the heat and excitement of an examination-room, would probably puzzle a good many. The time for dictation is half an hour, and the above quotation is almost one-half of what was given to the competitors. They had, in addition, another dictation paper of the same length, and the same time was given for writing. For those who have received a sixth grade education, the arithmetical examination is not a difficult one. Let us extract one or two questions taken from one of the papers:—

"Add together $2\frac{3}{7}$, $\frac{13}{45}$, $1\frac{5}{14}$, $3\frac{8}{35}$." Surely almost anyone who reads this who knows anything of arithmetic could

easily answer it. Take another one. For example: "In 176,432 inches, how many miles, furlongs, poles, yards, &c.?" Another one: "What is the simple interest on £1,344 for 2½ years at 3¼ per cent. per annum?"

Two hours and a half were allowed for thirty-nine questions. Competitors are expected to answer as many as they are able, but it was not thought that any would be able to deal with all the questions. At the conclusion of the ordinary arithmetical examination a half-hour's dose of the long addition sums, with which Civil Service candidates are only too well acquainted, and which are known as "tots," is given. One of the most difficult papers in this examination is that in geography. There are ten questions, the time allowance being three hours. Here are three specimens:—(1) "Define what is meant by the zones on the earth's surface, and explain as fully as you can, with a diagram, why the tropics are hot and the poles cold." (6) "Enumerate the mountain ranges of Europe; describe or show by sketch map their direction and extent; state the names and heights of their chief summits." (9) "Enumerate in order the chief islands, coasts, and ports passed in a voyage from London round the Cape to Bombay, thence to Singapore and Canton, mentioning which are British possessions."

CIVIL SERVICE CLERKSHIPS.

The Class I. clerkships consist of the clerks employed in the Colonial Office, Admiralty, and many other departments. The examination for the new higher division clerkships is not an easy one; and, to render it still more difficult, the precautions used in the Civil Service of India to prevent smatterers passing have been adopted. The examination lasts nineteen days. The subjects are:—English composition, including précis writing (500 marks); history of England, including that of the laws and constitution (500); English language and literature (500); language, literature, and history of Greece (750); language, literature, and history of France (375); language, literature, and history of Rome (750); language, literature, and history of Germany (375); language, literature, and history of Italy (375); mathematics—pure and mixed (1,250); natural science—that is (1) chemistry, including heat, (2) electricity and magnetism, (3) geology and mineralogy, (4) zoology, (5) botany (1,000)

—(a total of 1,000 marks may be obtained by adequate proficiency in any two or more of the five branches of science included under this head); moral sciences—that is, logic, mental and moral philosophy (500), jurisprudence (375), political economy (375). There is a preliminary examination in handwriting, arithmetic to vulgar and decimal fractions, and English composition. The fee for this preliminary examination is one pound, and for the competitive five pounds. In a recent competitive examination some of the questions were as follow:—In English composition, time allowed three hours—"Write an essay on (1) The Causes and Consequences of Imperialism in Ancient History; (2) The Influence Exercised by the Doctrine of Evolution on Modern Thought and Inquiry; (3) The Contrast of the Modern French, English, and German Prose Fiction." Précis writing consisted of making abstracts and dockets of several letters and other papers, and drawing up a narrative of a correspondence. In the history paper there was a choice of twenty questions, and correct answering of eight secured full marks. The first question was (1) "Give some account of Bede's Church History of the English; what other sources exist for the history of the English settlements in the early kingdoms? (2) State the composition and functions of Parliament in the reign of Henry the Seventh; (3) Write an account of the political career and views of Pym." The English literature paper was another three-hours one. There were thirteen questions in all, but not more than ten could be attempted in the time. Here are a couple of examples:—"Keats and Shelley are often coupled together, what characteristics do you think they had in common as compared with their contemporaries?" "Illustrate from the history of the pronouns the causes that have been at work in the forming of the English language." The Latin and Greek papers were stiff. The French was for the most part translations from French authors into English. The following passage from a work of Mr. Froude's had to be translated into French:—"The accession of Queen Elizabeth found commerce leaving its own channels and stretching in a dozen new directions. While the fishing trade was ruined by the change of creed, a taste came in for luxuries undreamt of in simpler days which were passing away. Statesmen accustomed to rule the habits of private life with sumptuary laws and to measure the imports of the realm by their own

conceptions of the necessities of the people, took alarm at the inroads upon established ways and usages, and could see only a most lamentable spoil to the realm in the over quantity of unnecessary wares brought into the port of London.' The French, Latin, and Greek papers numbered two each. In the "LOWER DIVISION MEN CLERKS" the majority of the appointments are in London. The salaries are (1) either £80 a year, rising every three years £15, to an ultimate £200; or (2) £95 a year, progressing by triennial increments to £250. In addition "duty" or extra pay can be earned by many of the clerks. The subjects are handwriting (400), arithmetic (300), compound addition (100), orthography (400), copying (200), indexing (200), digest of returns (200), English composition (200), geography (200), English History (200), and book-keeping (200). In the examination preliminary to this the subjects are, arithmetic, including vulgar and decimal fractions, writing, and orthography; the fee for each examination is 10s. The arithmetic paper in the preliminary is rather stiff, as the following sample questions will show:— "What is the simple interest on £975 for two years and four months, at 4 per cent. per annum?" (2) "Five men are employed five hours a day on certain work. After they have worked four days it is found one-twelfth has been done. Six additional men are then employed, who are to work seven and a half hours a day. When will the work be completed? supposing that they all work equally fast." (3) "Express 1 hour 20 minutes as the decimal of a day." Altogether, there were thirty-nine of this class of question, and in addition there were ten long "tots." Here is the dictation paper:— "The growth of nations presents something analogous to the growth of man: they all bear some marks of their origin, and the circumstances which accompanied their birth and contributed to their rise would, if investigated, explain their whole history. But hitherto facts have been wanting to researches of this kind: the spirit of inquiry has only come upon communities in their latter days, and when they have at length contemplated their origin, time had already obscured it, or ignorance and pride adorned it with fables. America is the only country in which it has been possible to witness the natural and tranquil growth of society, and where the influence exercised on the future condition of States by their origin is clearly distinguishable. At the period when the peoples of Europe landed in the new world, their natural cha-

racteristics were already completely formed; each of them had a physiognomy of its own, and as they had already attained that stage of civilisation at which men are led to study for themselves, they have transmitted to us a faithful picture of their opinions, their manners, and their laws. The men of the sixteenth century are almost as well known to us as our contemporaries. America, consequently, exhibits in the broad light of day the phenomena which the ignorance or rudeness of early ages conceals from our researches. Near enough at the time when the States of America were founded to be accurately acquainted with their elements, and sufficiently removed from that period to judge of their results, the men of our days seem destined to penetrate further than their predecessors into the series of human events. Providence has given us a torch which our forefathers did not possess, and has allowed us to discern fundamental causes in the history of the world which the obscurity of the past concealed from them." A second exercise was in addition given in dictation. In the competitive examination the dictation was, if possible, somewhat more severe, the arithmetic much more so, and the "tots" lengthy and numerous. The geography contained eight questions, such as "Describe carefully the river systems of Russia, and the geographical situation of all its seaports; and describe the geographical situation of Heligoland, the Corea, Bosnia, Luxembourg, Manitoba, Alaska, Venezuela, and Queensland, and state the principal characteristics of their population, productions, and government." The book-keeping was a difficult paper. The CIVIL SERVICE COPYISTS department is another popular branch. The examination is an easy one, and previous service relieves those who desire to undertake higher examinations of a good deal of time. Here are a few specimen questions from the arithmetical paper, perhaps the most difficult of all, though it is considerably less abstruse than that in the boy clerkships examination:—(1) "Write down in words 89603 and 5007. (2) Write down in figures three hundred millions seventeen thousand and seventy-five. (3) Write down in words 8013024." After this we have two easy addition and two subtraction sums. The eighth, ninth, tenth, and eleventh questions are simple multiplication and division, the twelfth is the multiplication of pounds, shillings, and pence by 77, thirteenth, the division of pounds, shillings, and pence by 9,

and the remaining questions are of about the same calibre. Altogether there are seventeen questions, with the addition of the regulation compound "tots." The limits of age are 14 to 18; the fee is 1s. to each examination. An extract from the Civil Service regulations may here be useful. It says, "Copyists may be engaged by the hour, day, or week, or by the piece. The engagement of all copyists not engaged for a shorter period will be by the week. Copyists engaged for the day or upwards will be employed for a number of hours constituting an official day in the department to which they are attached. But if they are required to give their services after official hours, they must do so, and they will be paid at the same rate, whether by the hour or by the piece, as in the official hours. A copyist refusing to work after the official hours on those terms, without any excuse satisfactory to the authorities of the department, will be liable to dismissal by them without notice." The rate of pay commences at fourpence an hour. An additional halfpenny per hour is usually allowed at the end of each year of approved service. At the age of nineteen the boy copyist is no longer eligible for employment in this branch. In order to prevent disappointment, it should be here stated that in this and some other branches of the Civil Service a number of those who have been trained either wholly or partially at the public expense for the post of teacher in schools in connection with the Committee of the Council for Education, or the Board of National Education, Ireland, are forbidden to enter. In a number of cases the disability is removed by the obtaining of commission from the department, which must be ratified by the Civil Service Commissioners. FEMALE CLERKS are employed in the Civil Service to a considerable extent. A female clerk must not be more than 18, nor less than 20, on the first day of the competitive examination. The subjects are: (1) arithmetic; (2) English composition, with special reference to grammatical accuracy; (3) geography; (4) English history. Previous to this there is a test examination, in which spelling, handwriting, and arithmetic, as far as decimals and vulgar fractions, are compulsory. The fee is 1s. for the preliminary, and 1s. 6d. for the competitive. The subjects in the competitive examination are somewhat difficult. They consist usually of copying, dictation, and arithmetic. The following extracts from a paper on the last subject will prove of service. The first ten questions are the customary addition,

multiplication, subtraction, and both kinds of fractions. Question 12 (preliminary) is, "Find the simple interest of £375, at 2½ per cent. per annum in 8½ years." The twenty fourth question was, "Find the cost of a piece of floor-cloth 21 ft. long and 8 ft. wide, if a square yard cost 2s. 9d." The twenty-sixth question was, "In what time will the simple interest of £725, at 4 per cent. per annum, amount to £16 16s. 3d. more than the interest on the same amount for the same time at 3½ per cent. per annum?" In a recent competitive examination the arithmetic was a difficult paper. The following are some specimen questions:—"How many yards of paper, 30 inches wide, will be required to paper a room 16 ft. 9 in. long, 14 ft. 3 in. wide, and 9 ft. high, allowing 15 yards deduction for doors and windows? A man derives an income of £1,380 from an investment in Argentine Six per Cents., which are 102; if he sell out and invest in Chinese Seven per Cents. at 115, what sum must he further invest in the same security in order to yield a total income of £1,519?" Composition is a special feature. Candidates had in the examination from which we are making extracts either to describe "a visit to a watering-place," or "the life of a great authoress." In geography some of the questions were, "What rivers take their rise in the American Andes? State the countries each traverses, and the chief port, if any, at its mouth. Where are the following places; for what are they noteworthy: Kiel, Copenhagen, Valparaiso, Monte Video, Goa, Pondicherry?" In the history paper the following questions were put: "Connect with the existing names of counties the various invasions of Britain by the Anglo-Saxon race, and give a detailed description of these invasions." "Give some account of the colonisation of Ulster and the Darien expedition." Nearly seven hundred of the female clerks are employed in the General Post Office in London, and their salaries commence at £65 per annum, and rise in increments of £3 per annum to £80. Three superintendents receive £180 to £190 a year, rising by an annual increase of £15 to £300. Three ASSISTANT SUPERINTENDENTS are in receipt of £180 a year, nineteen get £120, rising by £10 increments to £170; eighty-seven get £85 a year, with an annual rise of £5 to £110. CIVIL SERVICE NEWSPAPERS. (See Civil Service Regulations.) There are a number of these, and their names can be ascertained from any bookseller. They give much assistance to

candidates. *The Civil Service Year Book* early in each year should be purchased by every intending Civil servant. Those already in the Service will undoubtedly possess it.

CIVIL SERVICE REGULATIONS.

These should be carefully studied by candidates for appointments of any nature. Before every examination is held it is announced in *The London Gazette*. Few persons see this publication, and *The Civil Service Candidate*, *Civil Service Competitor*, and other papers give the necessary information. Every examination (except where expressly stated to the contrary) is open to all natural-born subjects of Her Majesty, with the exception of persons actually serving in the Army and Navy, and members of the Royal Irish Constabulary of less than five years' active service. Civil servants are eligible, apprentices and engineers in Her Majesty's dockyards, persons who have been trained in the Normal Schools at the public expense, and those who have been trained in the laboratory of the Inland Revenue Department. In certain cases those already in the employment of the Civil Service must produce to the Commissioners a written permission from the heads of their departments to attend any other examination, which must be produced at least one week before the day of the competition. Those who have been trained in Normal Schools must obtain the consent of the Committee of the Council of Education of Great Britain, or the Commissioners of National Education Ireland, in conformity with the rules sanctioned by the Lords of the Treasury. In the case of those who have been trained in the laboratory, the consent of the Inland Revenue Board is also necessary. One of the mistakes most frequently made by Civil Service competitors arises from misapprehension of the rules of age allowances. The matter is simple enough. Persons who have served for two consecutive years in any civil situation to which they were admitted by a certificate of the Civil Service Commissioners, or in the Royal Irish Constabulary, or as registered copyists in connection with the service, may deduct from their actual age any time not exceeding five years which they have spent in the service. Members of the military and naval service, commissioned or non-commissioned, may deduct from their actual time during which they have served towards pension. We

should here mention that in the Civil Service the scale of fees is as follows :—When the initial salary or wages does not exceed the rate of £50 pounds per annum the fee is 1s.; over £50 and under £75 per annum the fee is 2s. 6d. For situations in which the annual salary obtainable in the ordinary course of promotion without further examination or certificate, the fee is—for over £75 and under £100, 5s.; over £100 and under £150, 7s. 6d.; over £150 and under £250, 10s.; over £200 and under £250, 12s. 6d.; over £250 and under £300, 15s.; over £300 and under £350, £1; and then at the rate of increase of £1 for every £50. The transfers from one department of the Civil Service to another are, in respect to fees, treated the same as though they were new and original appointments, unless the Treasury otherwise directs. For temporary situations in the Civil Service the fees are one-half of the above rates, except in the case of the smallest examinations. The address of the Secretary of the Civil Service Commission is "The Secretary, Civil Service Commission, Cannon-row, Westminster, London, S.W." To this address all communications requiring information should be sent. It is probable that, very shortly, marked changes will be made in the Civil Service. Up to the present it is not yet decided whether they will be brought into action at all.

CLERKS (Commercial).

Until the notion that to be a clerk is more respectable than to earn a weekly wage as a mechanic is dispelled the market will be as overcrowded as it is at present. In the United States an educated mechanic has at least as many social privileges as a clerk, and with the progress of the new educational movement in Great Britain, the same state of civilisation will be attained here. There will always be clerks; but the introduction of the simpler methods of book-keeping, of female labour in business houses, and of the type-writer, will speedily reduce their number. We cannot therefore recommend anyone to contemplate clerkship as a way to earn a living. In some of the higher and special branches (dealt with under their respective heads in this Work) occupation will be open to those capable of retaining it. For the benefit of those who, in spite of our advice, and having given serious attention to the subject, are still determined to enter the ranks, we would suggest that pro-

ficiency in the following subjects is absolutely necessary :— (1) shorthand, (2) book-keeping, (3) correspondence, letter copying, and filing and general office work, and (4) one foreign language, are essential. The clerk who likes to render his position still more certain, can do so by learning to operate the type-writer, which is rapidly being introduced as a time-saving machine in large offices. See Type Writing.

CLERKS (Miscellaneous).

A large number of clerks with no stated duties, whose acquirements are usually slight and whose position is naturally precarious, are employed in banks, warehouses, brokers' offices, newspaper offices, shops, lawyers' offices, manufacturers' offices, publishers' offices, the offices of life insurance companies, and other commercial establishments. Appointments in many of these are obtained through private influence ; in others, from advertisements. In London, *The Daily Telegraph* gives a lengthy list each day of vacant appointments.

CLERKSHIPS (Applying for).

Considerable importance must be attached to the method of applying for a clerkship. If through personal introduction, it is best that the applicant should be neatly but not gaudily attired. He should select some time in the day for calling when the principal is not likely to be particularly engaged. If a reply to an advertisement is sent, it should be as brief as possible, and a model of a short business note. The writing should not be laboriously careful, nor, on the other hand should it evince lack of painstaking. When testimonials are forwarded, copies only should be parted with. The essential facts only should be stated, and these are age, education, previous employment, if any, acquirements and names of references. Unless asked for in the advertisement, a "stamp for reply" should not be sent.

CLERKS (Female Commercial).

In many departments of commercial work well-educated young women are rapidly superseding men. The requirements are usually shorthand and book-keeping. It is found that women are more careful than men, and that they are

much more honest. They are punctual, industrious, and reliable. The large commercial houses which have introduced them to their departments have found them valuable assistants. Following the example of the London and North Western Railway Company, several railways have given employment to women. The London and North Western employs ladies at London, Birmingham, and several other important centres. They are for the most part occupied in the financial department, and it is a noteworthy fact that the average of errors has been considerably reduced since they commenced work. The salaries are from £20 to £80 per annum, and the hours from nine till five. The Prudential Life Insurance Company has in its employ over 200 clerks at its mammoth establishment in Holborn, London. We found on application that they have a very large number on their books awaiting engagement. We were shown over the establishment, and can bear evidence to the liberal arrangements which have been made for the ladies employed. There is a library, an indoor "playground," or promenade, and a refreshment-room. Applicants must be daughters of professional men, must be between the ages of 18 and 25, and must pass an examination in arithmetic, spelling, and handwriting. The salaries rise by £10 increments from £30 to £50 per annum. Superintendents receive from £100 a year upwards. A number of ladies are employed by Mr. Upcott Gill, publisher, 170, Strand, W.C. Several other publishers are giving employment to ladies, notably, Messrs. Kelly & Co., 51, Great Queen-street, W.C., publishers of the well-known directories. The limits of age are from 14 to 20, and the salaries are from 8s. 6d. to 25s.; the hours are from 9.30 to 5.30. Messrs. Rothschild, of St. Swithin's-lane, E.C., have one or two of their departments in the hands of ladies. The salary is from £40 a year to £70; the limits of age from 17 to 25. Applicants must be well educated, and in possession of undeniable references. The United Telephone Company employ a considerable number of ladies. In the United States the introduction of the telephone has opened up a large sphere. The salaries are from £28 per annum to £70. Messrs. Baring Brothers have in their Bishopsgate-street establishment several ladies employed. These receive from £45 to £75 per annum. At the large drapers' shops in London and the suburbs, lady book-keepers are employed, receiving from £15 to £20 per annum and

board and lodging; the limits of age are usually from 18 and upwards, and the requirements a knowledge of book-keeping and smartness in "changing money." Several of the large Stores in London employ a large number of lady clerks. The salaries are £30 to £100 a year, and the limits of age from 17 to 30. In many restaurants the book-keeping is undertaken by girl clerks. The salaries and limits of age vary. Shorthand can be learned at the Metropolitan School of Shorthand, 27, Chancery-lane, E.C.; type-writing at Madame Monchablon's, 26, Austin-friars, E.C.; book-keeping at 22, Berners-street, Oxford-street, and at the College for Working Women, 7, Fitzroy-street, Fitzroy-square. In most of the large provincial centres establishments have also been opened. Young women seeking occupation as clerks should use discretion in selecting suitable establishments. Many of the advertisements appearing in the newspapers must be regarded with suspicion. In no instance should deposits be paid.

COLLAR-MAKING.

The making of cuffs and collars employs a considerable number of skilled needlewomen in every town in Great Britain. Advertisements appear in leading newspapers when "hands" are required. The work is usually given out on "piece," and from 8s. 6d. to 25s. a week is earned.

COLLATORS (see Printers).

COLONIAL OFFICE.

Clerks in the higher division must be between the ages of 18 and 24. Situations are obtained by open competition. The initial salary is £250, rising to £600 by annual increments of £20, with prospect of further promotion. Two of the junior clerks, selected by the Secretary of State, occupy furnished apartments within the building, to attend to telegrams and pressing business out of office hours. Each of these clerks receives, in addition to his salary, furnished rooms, and an allowance of £25 a year. The same limits of age are enforced with regard to clerks to the Ecclesiastical Commission. In this Office the salary commences at £100, and rises to £400, with prospect of further promotion

to £600. Home Office clerks run in the same lines, with the exception that the maximum of salary is £600, and for heads of departments £800. Address Civil Service Commissioners, S.W.

COMMERCIAL TRAVELLING.

Commercial travellers are usually selected from the young men of promise in the houses of manufacturers and agents. It is impossible to undergo any special training for the work. The chief requirements are strict integrity, a good appearance, address, and tact. In some instances salary is given, but in the majority commission is becoming the rule.

COMPANIONS IN LUNATIC ASYLUMS.

Ladies who have received a fair general education, and are possessed of some musical proficiency, are, says the *English Woman's Year Book*, engaged as companions to the lady patients in private lunatic asylums. They are required to spend the whole day with them, from breakfast time at 8 a.m., till they retire for the night between 9 and 10. No personal attentions are required; the day is spent in music, fancy work, games, walking in the grounds, and driving. Frequently of an evening there is dancing, a concert, or theatricals in the drawing-room, and in these the companions join. The pay for such services varies from £30 to £60 a year, with board and lodging. Sometimes the salary reaches £100. The vacancies are somewhat difficult to hear of, and must be inquired for privately. The position, though highly desirable, is a trying one. Great care, tact, and patience are incumbent on those engaged in the work of curing the mentally ill, also a cheerful disposition and a sympathetic nature.

COMPOSITORS (see Printers).

COOPERS.

The trade is one in which there are numerous sub-divisions, the chief of which are tight, or wet and dry, or slack cast manufacture. They are known as dry coopers, wet coopers, white coopers, and coopers in general. Of all departments the manufacture of tight casks or barrels for holding liquids is that which demands the greatest care

experience, and skill, and consequently the one at which the most money can be earned. Learners serve a three years' apprenticeship, the wages being 5s., 7s., and 10s. It is necessary to have a correct eye, as the nature of the business precludes the use of rule or square. White cooperage embraces the construction of wooden tubs, pails, churns, and other even staved vessels. This branch is comparatively light and clean, but it is not so well paid for as the wet or dry. There is more competition; a very small capital is required to commence business as a master in this way, whereas for large work many thousands of pounds must be sunk before an extensive business can be secured and profitably conducted. Repairs of all kinds are usually done by "coopers in general." Journeymen coopers earn about the same wages as carpenters.

COPPER SMELTING.

Copper smelting is a more unhealthy occupation than iron smelting, owing to the amount of arsenic and sulphurous acid evolved, yet the families of copper workers who live in the thick of the smoke are usually healthy and remarkably free from epidemics. The work is very similar to that of iron mills, and consists principally of rolling into sheets and rods. The weekly earnings of men are about as follow:—Converter, 30s. to 35s.; melter 36s. to 50s.; puller out, 30s. to 34s.; coker, 22s. to 26s.; lighter up 28s.; forgeman and tilter, 50s. to 60s.; lifter up (boy), 7s.; armour-plate labourer, 28s. to 45s.; rod roller, 45s. to 50s.; rod furnaceman, 20s. to 24s.; spring filter, 48s. to 50s.; sheet roller, 42s.; sheet furnaceman, 27s.; teemer, 36s. to 50s.; wire-drawer, 40s. to 60s.; boys, 8s. to 16s.; labourers, 21s. to 24s.; furnacemen, 28s. to 35s.; hammer-men, 25s.; rolling men, 30s. to 35s.; tube-drawers, 21s.; refiners, 49s. to 63s.; boys, 7s. to 10s.

COURIERS.

Men or women with a knowledge of languages, of a bright, cheerful disposition, and the power of making the best of things, may often obtain an agreeable holiday, and a profitable one, by undertaking the work of a courier. Anyone taking such a situation must clearly understand that the employer's comfort is to be considered first, and the em-

ployé's sight-seeing is quite a secondary consideration. It is the courier's duty to see after the luggage, to pack trunks, to go early to the station, and to engage rooms and carriages. He or she has to act as valet or as maid. The salary must be entirely a matter of arrangement ; no fixed sum can be given here. If required only for the journey, the courier is expected to return to England alone when the employer is settled in some Continental city. In addition to the sum received for services, expenses would have to be paid. Sometimes a courier may be retained to accompany an invalid. An interview with the family physician is often desirable in such cases, and also to be provided with a list of physicians recommended in the various towns proposed to be visited, in case of emergency. Advertisements of vacant posts will be found in *The Times* and *Morning Post.*

CUSTOM HOUSE (Officers in the)

There are numbers of branches of the Custom House open to the multitude. It is usually considered a popular branch of the Civil Service. The limit of age for the Outdoor Customs Department is from 19 to 25 ; and the Civil Service Regulations state that no candidate is eligible for appointment who is less than 5 ft. 4 in. in height and 34 in. round the chest; if the candidate is more than 5 ft. 10 in. in height he must not be less than 35 in. round the chest. Any defect of vision is regarded as a disqualification, and no candidate who has not been satisfactorily vaccinated within the last seven years can be appointed without re-vaccination. The subjects of the examination are : Handwriting (200), orthography (200), arithmetic, as far as vulgar and decimal fractions (300), and English composition (200). All of these are obligatory, and failure in any one incapacitates the competitor, who may, however, have another opportunity. The fee for this examination is 2s. 6d. The Board of Customs warn candidates that the men when employed on outdoor work on the river are liable to very uncertain hours, and that they are often employed night and day for a long period. The outdoor officer of the Customs at any port of the kingdom is an officer who, amongst other duties, is required to perform duty in rowing boats, or on the river, or elsewhere on guard vessels ; or to assist a superior officer in " rummaging " vessels when required, in order to discover contraband goods,

and to do duty in the docks as a patrol to guard vessels lying there. There is in addition indoor work. On occasions an officer has to take care of bonded warehouses, deliver packages of goods, and to lock and unlock the premises night and morning. In the summer the hours are, from March to November, eight in the morning till four in the afternoon; and during the winter nine in the morning till four in the afternoon. The pay is at the beginning £55 per annum, with an annual rise of £1 10s. to £80. By passing other examinations, or by exceptionally good conduct, a further rise to £100 a year is quite possible. In the Customs Outports the examination is difficult. The subjects are as follow: Orthography and handwriting (400 each), arithmetic (400), MS. copying (200), indexing (200), digests of returns (200), geography (200), history (200), composition (200), and book-keeping (200). Of the arithmetical examination a fair notion may be gained by the following questions:—"How many times is one-seventh of 1⅓rd of 2s. 2¼d. contained in 16s. 8d.?" "Supposing the income-tax to be 5d. in the £ in one year and 8d. in the £ in another, a man whose income is one-tenth less in the last year than in the first year finds that he nevertheless pays £11 9s. 2d. more income-tax; what was his income in the former year?" One of the geography questions was, "Describe generally the vegetation of Central Africa, California, Japan, and Siberia, and name the plants which thrive in each." In the history paper the following occurred:—"Describe the steps which led to the consolidation of our Indian Empire." The fees are 2s. 6d. for the preliminary, and 2s. 6d. for the competitive. The remuneration is £70 per annum, increasing by £5 and £10 to £200. The holiday is one month in every twelve. Address Civil Service Commissioners, S.W.

CUTLERY.

Cutlery, in Sheffield parlance, means the handling, making up, and finishing the knives, razors, scissors, &c., in bone, ivory, and wood. Of grinders there are several distinct branches: grinders of forks, spring knives, razors, scissors, table knives, edge tools, saws, surgical instruments, files, and sickles. The wages fluctuate, but the ordinary rates are as follow:—Edge tools—forgers, 40s.; strikers, 30s.; grinders,

with apprentice, 38s.; grinders, single, 38s.; hardeners, 28s. Files—forgers, 30s. to 90s.; strikers, 20s. to 65s.; forgers, single handed, 40s.; cutlers, 20s. to 60s.; hardeners, 25s. to 35s.; scourers, 9s. to 18s.; grinders, 20s. to 100s. Cutlery—Spring knife cutlers, 16s. to 35s.; grinders, 16s. to 35s.; forgers, 25s. to 40s. Razors—Cutlers, 28s.; grinders, 25s. to 35s.; forgers, 30s. Scissors—Forgers, 50s.; filers, 20s. to 40s.; borers and finishers, 25s. to 35s.; grinders (glazing and polishing), 40s. to 70s.; dressers (women), 8s. to 14s. Saws—saw makers (day), 28s. to 33s.; saw makers (piece), 25s. to 50s.; grinders, 40s. to 60s.; handle makers, 20s. to 30s.; scourers (women), 9s. to 12s.; warehouse-women, 9s. to 12s. Grinding is carried on usually in premises called wheels, which are let out by various owners to grinders who pay rent, or if they are on the premises of the manufacturer, he sublets them to his own workmen. Scourers and dressers are all young women, and are occupied in scouring the goods with sandpaper. The system of apprenticeship, which was formerly very common, has declined of late years.

DECORATIVE WORK FOR LADIES.

Mrs. Avant's studio, 13, Queen's Mansions, Westminster, is a centre for every kind of decorative work executed by ladies. She employs ladies for all the orders she undertakes, and keeps a register of workers in all departments. These she either sends out to private houses, or has the work done in her own studio, or at workers' own homes. Mrs. Avant devotes herself entirely to the direction of the work. She receives articled pupils, and twice a week holds classes for instruction in decorative art. A fixed percentage on the prices paid covers the studio charges, and the workers themselves earn according to the class of work they can produce. Experienced lady decorators are sent to advise as to colouring, by those seeking it, on payment of a small fee. A large business is done by ladies working under Mrs. Avant's direction in hand-painted globes for Sugg's patent gas-burners, finger-plates for doors, and other specialities used by the trade.

DELIVERERS (See Printers).

DENTISTS.

Dentists usually serve five years with an established practitioner, paying a fee of £100 or £200, and receiving a salary when efficient. They then pass a preliminary examination on general subjects, and enter the National Dental Hospital, where they must be "signed up" for at least two courses of the anatomy or physiology lectures. They then pass the L.D.S. examination held by the College of Physicians. Degrees can also be obtained in Scotland and Ireland. Since the Act of 1879 the social and financial condition of dentists has risen considerably. They now rank with surgeons.

DENTISTS (Manufacturing).

Manufacturing dentists employ boys and girls in making false teeth. They serve an apprenticeship of about two years. The premium varies according to the position of the firm. The hours are from eight till eight, and the wages range from 15s. to 18s. per week.

DESIGNING.

This is a branch of skilled work which has not been sufficiently cultivated by the British workman and workwoman. On the Continent, designing has reached a pitch of perfection which it has not attained in this country; it has been made a special branch of study for years, and, doubtless, with the growing interest in technical education, we shall follow. Salaries of from £50 to £100 per annum can be earned by clever designers of either sex. There is an increasing demand for designers of fabrics, papers, ornaments, and the thousand and one requirements of our civilisation which have been rendered necessary by the new art movement. The necessary education can be had at the great national school at South Kensington.

DISPENSERS (Male and Female).

This is the latest branch of work which has been taken up by ladies with success. We cannot recommend a better way to earn a living for women of medical tastes than this. A good knowledge of Latin, and of medical Latin in particular, is necessary, and a very accurate acquaintance with arithmetic

and book-keeping is essential. The limits of age are from twenty-five upwards, and the income to be derived from £20 to £100 per annum. Full particulars will willingly be given on application at the New Hospital for Women, Marylebone-road, London, where the necessary education can be had for about £5. Male candidates, with the necessary primary qualifications, should apply at a hospital.

DOCKYARD CLERKS.

Dockyard clerks are liable to serve in any naval establishment at home or abroad. Candidates must be between the ages of 18 and 24. The salary commences at £100, and rises to £400, with prospect of further promotion. The examination for dockyard apprentices is held on the first Tuesday in May, in London, as well as in the several Dockyards. Those who desire to be examined in London should send in their applications before March 1 to the Secretary, Admiralty, London, S.W.; other applicants should address the Dockyard Superintendent. The age of candidates is limited to between 14 and 18. The examination subjects are: Arithmetic, orthography, handwriting, grammar, English composition, geography, Euclid, to third Book, Algebra, up to and inclusive of quadratic equations. Candidates who fail to pass in the first three subjects will be disqualified, and their papers will not be examined. Successful candidates are required to serve an apprenticeship of seven years, during which they receive allowances commencing at 3s. a week, and rising to 15s., and no candidate is accepted unless someone undertakes to support him during apprenticeship. When out of their time, the salary commences at 33s. a week, rising to £300 per annum. A limited number of apprentices who have served five years are selected for a further competitive examination for study at the Royal Military College, Greenwich, and during a three-years' course there they receive 22s. 6d. a week. If found well qualified at the end of the course, they are eligible for appointments as supernumerary draughtsmen, with salaries from £400 to £600 per annum. Candidates successful at the further examination for the Royal Naval College must enter into a bond to serve the Admiralty for seven years after the completion of their apprenticeship.

DOCKYARD SCHOOLMASTERS.

Dockyard schoolmasters are required to pass in mechanics, mathematics, hydrostatics, elementary chemistry and physics, besides the ordinary subjects, and to pay a fee of £3. They must also produce satisfactory proof of ability and experience in teaching. Evidence on this point must be sent in at least a week before the date of the competition. If satisfactory, the candidate will be admitted to compete, subject to such further inquiry as may be necessary. The salary generally commences at £120, but the emoluments vary with the Dockyard.

DRESSMAKING.

Dressmaking, whether regarded from the point of view of one who wants to earn a living or to effect a saving in domestic expenditure, is important work. It has been estimated that of the number of women workers in this country one-sixth support themselves by the needle or the sewing-machine. Dressmaking can be learned either by apprenticeship to a milliner or a dressmaker, the premium for which varies from £20 to £150; by attending the classes at the London Institute for the Advancement of Plain Needlework, 40, Upper Berkeley-street, London, W.; or by visiting the Scientific Dress-Cutting Association. The headquarters of this Association are at Regent-circus, London, but branches are established in every important town in the three kingdoms. At the headquarters, classes are held daily, from 9 till 6, and every detail appertaining to the practical and theoretical part of dressmaking is taught. Students, on entering the school, are instructed to draw from the chart, for the measuring and cutting. A fee of £2 2s. is charged, payable in advance. The number of lessons is not limited, the pupil goes on until she is perfect, and on the completion of the course a certificate of proficiency is given. Some gain the first-class certificate in eight weeks, but three months is considered the average time. Each pupil has to find her own materials; but, as calicoes are the chief things required, the cost should not exceed 12s. or 15s. If, after gaining the certificate, a lady wishes to hold the diploma, she is expected to study for a longer time, and to make at least three dresses. She is fully instructed in measuring, cutting, draping, trimming, sewing, matching, fitting, copying designs, managing

work-room, giving estimates, buying and selling, and, in addition, is specially taught by the manager how to keep accounts, how to correspond on business matters, make out invoices, the rate of profit, what prices to charge, what wages to pay, and the number of dresses to be turned out weekly according to the hands in the work-room. To gain a diploma takes from four to six months. The fees for this course are 12 guineas. The Association does not guarantee a diploma to all who pay the fee, the securing of it depends entirely upon the ability of the learner. In no case is a diploma granted before the first-class certificate is gained. Some do not care to go through the whole course. To meet this, the Association grants the following five certificates:—(1) Pupils' certificate for measuring and cutting, £2 2s.—average time, three weeks; (2) dressmaker's certificate for measuring, cutting, and fitting, £4 4s.—average time, six weeks; (3) teacher's certificate for cutting in all details and teaching, £4 4s.—average time, four weeks; (4) first-class certificate for measuring, cutting, draping, and making dress, £6 6s.—average time, three months; (5) diploma for entire system, £12 12s.—average time, six months. Situations as improvers, ladies' maids, dressmakers, milliners, and useful companions, are found free of charge; but anyone placed out by the Association must keep her place one year, or forfeit 5s. A lady holding a diploma can always, it is stated, command a salary from £100 to £200 per annum. One of the former pupils is said to be actually earning £600 at the present time. A class for millinery has been lately opened. The whole course consists of thirty-six lessons, which may be taken within one month, and at a cost of £3 3s. An exhibition of pupils' work takes place in May, when a gold and silver medal are awarded. At the last exhibition two situations—the one of £50, the other of £100 per annum—were open to the winners of three medals. Some pupils have friends in London with whom they can live, but others are glad to find a home close by at a moderate cost. For their benefit, the Association has made arrangements with the Young Women's Christian Association, Mortimer-street., the Girls' Friendly Society, Bourdon-street, Berkeley-square, the Soho Club, 59, Greek-street, Soho, and St. Anthony's House, 4, Bulstrode-street, Manchester-square, to accommodate their pupils. The charges are about 3s. 6d. per week for bedroom, 3d. for breakfast and tea, and 6d. for dinner.

Parents may entrust their daughters to these homes, as the strictest supervision is maintained. The Association by no means confines its instruction to women. A large number of men who intend to be tailors go there for lessons. The fees are the same for both sexes, and similar certificates are granted.

ELECTROPLATING.

Electroplating holds a middle place between chemical and mechanical occupations. The great metal establishments of Birmingham and Sheffield employ an immense number of hands, male and female, who occupy a high position among artizans. The business is a clean and healthy one, and about one-sixth of the labour is performed by women. Casters of German silver get from 35s. to 40s.; fitters, 30s. to 50s.; stampers, 35s. to 40s.; polishers, 30s. to 35s.; chasers, 30s. to 50s.; assistant-depositors, 30s.; engravers, 35s. to 50s.; embossers, 35s. to 45s. Burnishing is done by women, who earn 15s., 18s., and 25s. weekly. Sheffield wages are a little lower than those of Birmingham.

EMBROIDERY.

This is not so remunerative a way to earn a living as it was formerly. Embroidering can be learned at either an artistic needlework establishment (many of these take apprentices at small premiums), or at the Royal School of Art Needlework, South Kensington. This school employs nearly 200 ladies, who are able to earn about £80 a year. The rules are as follow:—(1) Application for admission as qualified workers must be made to the manager by the applicants in person, and they must give two references to prove their position; (2) Applicants must fulfil the following requirements:—(*a*) They must be gentlewomen by birth and education; (*b*) They must be able and willing, when employed, to devote seven hours a day to work at the school; (3) Every applicant is required to go through a course of instruction, for which £5 is charged; (4) The course of instruction consists of nine lessons in art needlework, of five hours each. If, after the first two lessons, in the opinion of

the teacher, the applicant is not likely to be successful as a needleworker, she will be recommended to retire, and on so retiring the £5 will be returned to her; (5) The school enters into no engagements to give employment to any lady. There is always a steady demand for the higher branches of Ecclesiastical Embroidery. Work can sometimes be obtained, by those who are really efficient, on application to Ecclesiastical furnishers and robe-makers. Instruction is given also by the Sisters of the Church, 29, Kilburn Park-road, London, N.W. In order to prevent disappointment, we should state that the standard is exceedingly high, and that the remuneration is not excessive.

EMIGRATION.

Whether to emigrate or to stay at home is a question that is at all times being discussed by persons of both sexes and all classes in this country. Such contrary opinions are held, and even by those who have visited most parts of the globe, that we shall not attempt to advise anyone to take what is, without doubt, a most important step in life. But we can guarantee that the information we supply is absolutely authentic. It is based, not upon the highly coloured statements of emigration agents, persons for the most part employed by steamship and railway companies, in order to obtain the custom of emigrants, but from the official representatives of the various colonies and countries, and from independent witnesses recently returned. We cannot too seriously warn those who are tempted to leave their homes by these agents, and particularly by the travelling "touts," who go from town to town and village to village lecturing upon the advantages of leaving what they are pleased to call "a land of poverty and decay" for homes of "freedom and plenty, where the earth and its fruits are to be had by all." It is too often the case, unfortunately, that, deluded by their misrepresentations, young men and old leave comfortable quarters and good friends for dreary wastes where a thistle could not be tempted to thrive, or for crowded cities teeming with an impecunious population. Everyone must know of some individual or family who have gone out in the hope of improving their circumstances, and who have returned, after great expense and loss of time, with no other result than in-

jured health and prospects. Numbers are never able to return, they cannot raise the necessary passage money. Emigration is by no means a panacea for poverty. A man who has failed after good opportunities in Great Britain will not necessarily succeed in America or Australia. The great advantage of emigration lies in the fact that, if properly undertaken, it places the individual in a sphere in which he will be able to discover additional opportunities for the exercise of his energy and talent. Generally speaking, it is not advisable for those who work with their brains rather than with their hands to leave any great centre of industry. Clerks, shop assistants, and others whose occupation is of a similar nature, need not expect to find work in the colonies or in the United States. These countries have plenty of young people of their own engaged in this kind of work. It is folly, therefore, to expect that any other work than that known as manual labour will be acceptable. The reader who has decided to emigrate will find the following hints of great benefit. Having decided to emigrate, and fixed upon the locality, the first question that will suggest itself to the emigrant is "What to take." The advice of Mr. F. W. Pennefather is worth repeating. "My advice," he says, "is simply this: When going to a colony or to any remote country, take all the clothes you are likely to require on the voyage, remembering that while at sea you may pass through every variety of climate, from a tropical summer to an English January. It is well, of course, to take out a good supply of clothing; but I usually find that 'new chums' who have come out with an elaborate outfit discover that at least half of it is unsuitable or unnecessary. Every colonial or foreign resident who has been concerned with emigration of whatever class will be prepared to corroborate this. Let the traveller start with the belief that he should take with him as little as possible and he will be right." Most of us have seen some friend depart to the colonies armed to the teeth, and with a stock of raiment sufficient to start a shop. Much of this is absolutely unnecessary. Business people in America and Australia are dressed almost exactly as are their cousins on this side of the water. The man who goes out to Chicago with a red shirt, tall boots, a sombrero hat, and a bowie knife, will find these articles and implements as foreign to that city as they would be to London. On the subject of outfit, as in every other connected with emi-

gration, the Emigrants' Information Office, 31, Broadway, Westminster, S.W., should be consulted. This office is one of the most useful in the country. It will supply an emigrant with the very latest information, and it will moreover be careful not to give erroneous advice. The information is mainly obtained from the various Colonial Governments. The customs tariffs of the colonies are constantly changing, it is necessary therefore to be supplied with the latest rates. In most countries emigrants' belongings are not required to pay duty, and in countries where duty is usually charged it can be avoided by wearing the articles on the voyage out, so that they do not look new on arrival. A good stock of flannel underclothing is useful in any climate, and an ordinary emigrant cannot do better than take with him a plentiful supply of this. Shoes and boots should always be purchased in England, where they are cheaper than in almost any other part of the world. A stout overcoat and plenty of strong tweed-clothing are useful. On no account should a silk hat be taken. They are eschewed everywhere except in Great Britain. The best hat for all round wear is the low-crowned pith or cork helmet with a broad brim. Cork is better than pith, inasmuch as it can be packed without fear of breaking. For additional comfort on board ship it is advisable to take some canvas shoes with rubber soles. With mechanics an important question is whether or not they shall take their tools with them. On this head the Emigration Office states, "Mechanics are advised to take such tools as are particularly adapted to their trades." In most of the colonies there is no difficulty in getting ordinary implements of labour, complicated or special tools should always be taken from England. Having touched upon a few general points, we will now enter upon the outfit question in detail. The emigrant will require a box, case, or package for the conveyance of his personal belongings. The following sizes and prices are furnished by a respectable and moderate firm of packing-case makers :—

Box for Cabin.

Length.			Breadth.			Depth.			£	s.	d.
ft.	in.		ft.	in.		ft.	in.				
2	0	by	1	8	by	1	0½	.....	0	8	6
2	3	,,	1	8	,,	1	0½	.....	0	10	6
2	6	,,	1	8	,,	1	0½	....	0	12	6

Sea Chest (Dovetailed).

Length. ft.	in.		Breadth. ft.	in.		Depth. ft.	in.		£	s.	d.
2	0	by	1	6	by	1	4	.....	0	12	6
2	3	,,	1	6	,,	1	5	.....	0	14	6
2	6	,,	1	7	,,	1	6	.....	0	16	6
2	9	,,	1	8	,,	1	7	.....	0	19	6
3	0	,,	1	8	,,	1	7	.....	1	2	6
3	3	,,	1	9	,,	1	7	.....	1	4	6

It must not be forgotten that a number of articles will be required for use on board ship. These fittings are as follows :—

Cheap Fittings for Steerage Passenger.

	£	s.	d.
Bed and Pillow	0	5	6
Two Coloured Blankets.....	0	6	6
Two Sheets	0	3	6
Counterpane	0	2	6
Four Towels.....	0	3	0
Hook-pot	0	1	6
Water-can	0	1	6
Wash-basin	0	1	0
Metal Plate	0	0	6
Drinking Mug.....	0	0	6
Knife and Fork	0	0	9
Tea and Table Spoon	0	0	6
Marine and Yellow Soap	0	1	6
Dock Dues	0	1	0
Canvas Bag to hold outfit.....	0	0	9
Total	£1	10	6

A little money in the form of hard cash should be taken. The rest should be carried in letters of credit, which can be obtained from the branch of any colonial bank in England before starting. English sovereigns are always worth their value in every country in the world. We will now give two examples of specimen outfits suitable for young men going to the colonies :—

Cheap Outfit for Colonies.

	£	s.	d.
Sea Chest	1	0	0
Toilet Requisites.....	0	7	0
Two pairs Boots.....	1	10	0

	£	s.	d.
Half doz. Towels	0	3	6
Overcoat	1	0	0
Two Suits of Clothes	3	0	0
One pair Braces	0	2	0
One doz. pairs Socks	0	12	0
One doz. Cotton Shirts	1	4	0
Half doz. Flannel Shirts	0	18	0
Cloth or Felt Hat	0	3	6
Total	£10	0	0

EXPENSIVE OUTFIT FOR COLONIES.

	£	s.	d.
Cloth or Felt Helmet	0	8	0
Travelling Cap	0	5	0
One doz. Merino Vests	3	0	0
One doz. Flannel Shirts	3	12	0
One doz. Cotton Shirts	2	0	0
Two doz. Merino and Wool Half-Hose	1	16	0
Two pairs Braces (leather)	0	4	0
Collars, Cuffs, Handkerchiefs, &c.	1	0	0
One doz. Merino Pants	3	0	0
Three Suits Tweed Clothes	10	0	0
Overcoat	3	0	0
Three pairs Laced Boots	3	15	0
Two pairs Slippers	0	15	0
One Life Belt	0	5	6
One doz. Towels	0	10	0
One Rug	1	0	0
Waterproof Coat	1	10	0
Leggings (leather)	0	7	6
A Camp Bath (folding)	0	15	0
Pocket Filter	0	4	0
Canteen and Fittings	1	10	0
Case of Toilet Requisites	1	15	0
Medicine Case (fitted)	1	5	0
Stationery, &c	1	0	0
Regulation Overland Trunk	2	0	0
Valise	1	0	0
Sea Chest	2	0	0
Revolver	1	10	0
Sundries	0	13	0
Total	£50	0	0

The above can be reduced or extended as required. Among the extras the following would certainly be very useful:—A country saddle, £5; riding and money belt, 7s.; a silver half

hunter watch, £5; aneroid, £4; field glasses, three guineas; riding breeches, £2 10s.; total £20. We would particularly warn parents against the "touts" who advertise for farm pupils for the colonies. Hundreds of British parents are annually deluded into sending their boys to Australia in the hope that they may become farmers. On arriving in the colonies the boys simply work as labourers. By far the best way is to write to the clergyman, bishop, or minister, in the particular portion of Australia which has been selected. The reply will probably mention a suitable farm. Premiums should on no account be paid. They simply go to swell the purse of the advertising agent. We will now deal with each colony in turn.

CANADA, as the oldest and the nearest of our commercial colonies, is naturally the first to attract the emigrant's attention. It is divided into seven provinces: Quebec, Ontario, Nova Scotia, New Brunswick, Prince Edward Island, Manitoba, and British Columbia. Besides these provinces, there are also the North-West Territories, divided into the districts of Assiniboia, Alberta, Saskatchewan, and Athabasca. In Canada, as a rule (though it must be remembered that it is a vast country), the climate is healthy at all times. Generally speaking, it is drier and hotter in the summer, and considerably colder in the winter than here. It has the advantage that it is subject to less sudden changes, and is therefore not so trying to weak constitutions, in spite of its tremendous frosts. To one who is not acquainted with the Canadian winter, the weather in that part of the globe is almost inconceivable. For example, in Manitoba, even when the thermometer is twenty degrees below zero, it is quite common to see men at work in the forests with coats off and sleeves turned up as on a spring day at home. Naturally this scene could not be witnessed on a windy day. It is an eight or nine days' passage from an English or Scotch port in fine weather to Quebec or Halifax. Free passages are no longer given to emigrants, but assisted passages are given to agricultural labourers and their families, servants, and others, by vessels leaving all great ports. These have to pay £3 each, children under 12 half price. It is necessary that they should provide themselves with a certain number of necessities for use on board. See Cheap Fittings for Steerage Passenger. The fares by most of the leading lines are about as follow:—First class,

£10 10s.; intermediate, £6 6s. and upwards; steerage, £4 4s. and upwards. At all the large Canadian towns depôts have been provided for the emigrants, and the poorer class get every attention. Land agents are stationed at each of these depôts, who assist the emigrants. Circumstances will naturally have much to do with the time of year selected by the emigrant for going out to Canada. If a choice is permissible, the early part of the year is to be recommended as the best for commencing a course of colonial experience in whatever pursuit. In the beginning of the year there is generally a greater demand for agricultural labourers than at any other period. Young men who are going out to seek work in towns stand a better chance of obtaining it than in winter, when trade in frost-bound countries is not so brisk. The expense of living in Canada is on the whole cheaper than in England, and the majority of articles of food are at least 50 to 70 per cent. cheaper than here. But clothing is about 2s. in the pound dearer. Rent, a necessary item in the expense of two or three young fellows going out together, varies greatly. Generally speaking, a wooden house of four or five rooms may be obtained for about 25s. to 30s. a month. Backwood settlers can generally purchase enough wood for building a house for £4 or £5. Board and lodging of the very plain kind costs from 15s. to £1. As most of our readers will know, the coinage of Canada is on the American system of dollars and cents. The value of a dollar is about 4s. 2d., and the £1 is a little less than five dollars. A cent is the 100th part of a dollar. In most of the large towns are to be found agents of the Canadian Government. In London the High Commissioner at 9, Victoria-chambers, Victoria-street, S.W.; at Glasgow, Mr. Thomas Graham, 40, St. Enoch's-square; and at Dublin, Mr. Thomas Conelly, Northumberland-house, should be personally consulted or addressed. Such a rapidly developing country is subject to frequent changes in trade. It is best therefore to be posted up in the latest information before starting. In the eastern portion employment of any description is difficult to obtain; the young Canadians are numerous and as full of energy as their American cousins, and there are quite sufficient of them to fill vacancies. "Out West," a stout heart and a pair of willing hands will generally bring success. Those connected with special trades should not proceed to Canada merely

on the chance of getting work. Introductions, and the means to support one's self, are required; for work will not be found in a day. "A man acquainted with no particular trade, but possessing a good strong determination, and willing to take the first thing that turns up, would," writes our friend, "more easily find employment than one who was a member of some trade, performing work not in general demand." In the west of Canada—the great North-West, as it is called—the more luxurious and artistic businesses do not flourish at all, for the reason that people want necessities only. A worker in ivory, a high-class confectioner, or a fashionable mantle maker should therefore avoid these new districts. We have pointed out the disadvantages of the premium system more than once, and in a Government work we came across some some very pointed remarks on the subject: "Young settlers, with or without capital, should not pay a premium to farmers for instruction in farming." This is a practice which ought certainly to be discouraged. None of these agents are really able to put into effect what they promise, and scarcely any case can arise in which the young man would not be in a better position by taking the advice of one of the Government agents in Canada, which he would get both gratuitously and disinterestedly. At Guelph, Ontario, there is an Agricultural College, where instruction in Canadian farming can be obtained at about £20 a year. If the young man has some capital, he should certainly go here for a while; if not, he should hire himself as an ordinary farm labourer, where he will be treated precisely as he would if he had paid a premium. Although every assistance and encouragement is afforded to the settler without capital, in the way of pecuniary advances on land, supply of farm implements on credit, and so forth, still there is a thorn even to this rose, for hundreds of men who have got land and implements on credit are never able to pay off their debts, and having spent years of toil in cultivating the ground, find it taken from them and sold at higher prices to others. Land, of course, can be much more cheaply worked there than here, for the soil requires no artificial stimulus. In England, one requires at least £10 an acre for farming; in Canada, from 15s. to 20s. is sufficient if a man will make up his mind to work. All young men can get employment on Canadian farms at wages infinitely superior to those at home. In

Ontario, freehold land, with buildings already erected, can be had for from £4 to £20 per acre, and any person above the age of 18 years can obtain a hundred acres in the free grant districts. The conditions of holding it are that 15 acres in each grant of 100 acres must be cleared and "under crop" within five years; a habitable house, at least 16 ft. by 20 ft., built; and personal residence on the land at least six months in every year. In Nova Scotia, an old-fashioned English Colony, every description of outdoor work is fairly plentiful. In New Brunswick land can be "earned" by working for the Government in various ways. In Prince Edward Island there is not much land available, owing to the fact that it is already taken up by sheep farmers. In Manitoba, to which thousands of Britons have proceeded during the past ten years, land can be had on the same terms as in the other provinces. But those going there and desiring to go up country must be prepared to rough it thoroughly. In British Columbia there is mining and farming, and in Vancouver Island coal is worked. A large portion of this province is covered with forest, and hence the lumber trade is considerable and sawmills numerous. The scale of wages for ordinary trades and occupations in Canada varies in the respective provinces, though not very widely.

THE CAPE.—We can hardly recommend emigration to the Cape. It has been under a cloud for so long that it is not certain whether the present improvement in trade is of a permanent nature or is only one of those temporary bubbles which so frequently attract tides of emigration only to doom the travellers to disappointment. The Colony and its dependencies are almost twice the size of Great Britain, and the climate varies considerably. In the North it is sub-tropical.

Under the head of CAPE COLONY we must place British Bechuanaland and Natal. The average of a steam passage is from twenty to twenty-five days in fair weather. No free passages are given at the present time, and assisted passages only in exceptional cases, and where an emigrant is already under a contract with an employer in the Colony. The fares by steamer are, to Cape-town: 1st class, from £36 and upwards; 2nd class, from £24; 3rd class, from £15 15s. and upwards. To Durban (Natal): 1st class, from £44 and upwards; 2nd class, £29

and upwards ; 3rd class, from £18 and upwards. For Cape Colony those who propose seeking occupation in the towns will find Cape Town the best point to land at. Farmers and those about to enter upon agricultural pursuits should go to Port Elizabeth or East London. The Grahamstown district is reached by train from Port Elizabeth, and the Queenstown and Aliwal North districts, reached by train from East London, are best suited for the British agriculturist. The cost of lodging is extremely high, but, in most parts of the colonies, though living varies, it is not much higher than in England genarally. Ordinary provisions, too, are on the whole not different in price. In Cape Town they are slightly higher, and in Natal somewhat lower than in Great Britain. Meat is of course cheaper than in England. Clothing is about 3s. in the £1 higher. English money is in use all over the country, and can be sent out in money orders not exceeding £10. The agents for the Cape in England are the Agent-General, Albert Mansions, Victoria-street, Westminster. The agent for British Bechuanaland, the Colonial Officer, Downing-street, S.W. ; for Natal, the Emigration Agent, 21, Finsbury-pavement, E.C.

A very large number of emigrants go to AUSTRALIA. In this marvellous region of colonial enterprise are included all the independent Australasian colonies, namely, Victoria, New South Wales, Queensland, South Australia, Western Australia, and Tasmania. As a whole, the climate of Australia is the most agreeable in the world. It is much warmer and drier, and is less variable than that of Great Britain, and has no winter to speak of. In the North, portions of the settled country fall within the tropics. They are in consequence subject to greater heat and dryness, which bring about droughts of a terrible nature. Perhaps it may be said that no quarter of the world (if we except British Columbia) offers a greater inducement to the emigrant, and at the same time demands greater care and circumspection in acquiring full and correct information, and in the selection of the locality best suited to enterprise. No group of colonies has shown such astonishing strides of progress during the last few years, and though by no means to be regarded as a refuge for everybody, none offers a wider scope for occupation. Australia may be reached from Great Britain, eastward, *viâ* the Suez Canal or the Cape of Good Hope ; westward, across the American Continent or round the

Horn. The eastern routes are the most frequented, and the general length of voyages are from forty-five to fifty-five days by steamer, and about three months by sailers. The fares are as follow :—

VICTORIA AND NEW SOUTH WALES.

	Sailing. £ s. d.	Steamer. £ s. d.		£ s. d.	
1st Class	36 15 0	47 0 0	to	70 0 0	each
2nd ,, ...	18 18 0	30 0 0	,,	42 0 0	,,
3rd ,, ...	13 13 0	13 5 0		—	,,
QUEENSLAND.					
1st ,, ...	36 15 0	50 0 0		—	,,
2nd ,, ...	18 18 0	31 10 0		—	,,
3rd ,, ...	14 14 0	16 0 0		—	,,
SOUTH AUSTRALIA.					
1st ,, ...	50 0 0	52 10 0		—	,,
2nd ,, ...	20 0 0	40 0 0		—	,,
3rd ,, ...	13 13 0	13 5 0		—	,,
WESTERN AUSTRALIA.					
1st ,, ...	36 15 0	47 5 0		—	,,
2nd ,, ...	21 0 0	26 5 0		—	,,
3rd ,, ...	15 15 0	15 15 0		—	,,
TASMANIA.					
1st ,, ...	50 0 0	63 0 0	to	70 0 0	,,
2nd ,, ...	25 0 0	40 0 0		—	,,
3rd ,, ...	16 0 0	15 5 0		—	,,

Neither free nor assisted passages are now granted to Victoria, New South Wales, South Australia, or Tasmania. To Queensland no assisted passages are given, except by nomination of friends in the Colony, by whom the payment, on a reduced scale, must be made there. Lest anyone may be led into the error that he can obtain a free passage to this colony, we may state that such passages are given only to single female servants and agricultural labourers, from 17 to 35 years of age. To Western Australia there are no free passages ; but emigrants possessed of small capital are given assisted passages. on making a deposit with the Crown agent *here*, repayable to them on their arrival in the colony. The cost of living in Australia varies. Ordinary provisions are the cheapest in Queensland, where the prices are from 30 to 40 per cent. lower than in England. In New South Wales they are somewhat higher, and in the other colonies

and in Melbourne about the same as in England. Meat, however, is in every case about one-third cheaper. Clothing in Victoria, New South Wales, South Australia, and Tasmania is about 10 per cent. dearer than in England; in Queensland, from 15 to 20 per cent. dearer. In Western Australia it is about the same as it is in England, but dearer in up-country districts. In Tasmania, board and lodgings are particularly cheap; elsewhere it is about the same as it is here. English money is current throughout all these colonies. It can be transmitted by means of postal orders or through a bank. On going out, these can be obtained at any post office in the United Kingdom, and made payable at any in the colony. It is, however, more convenient to transmit large sums through the medium of a bank or commercial house. Of the various occupations of Australia we shall speak shortly.

NEW ZEALAND is a better field for small capitalists than for those who propose to maintain themselves and their families by work alone. So much country has now been explored, and so much is now actually settled that the actual pioneer work is now considered done. The country differs somewhat from the Australian colonies, inasmuch as it is divided up into comparatively small provinces with capital towns, nowhere exceeding sixty thousand inhabitants. Unfortunately, the industries of the country have been affected of late years by the depression of prices, which, together with the anti-emigratory feelings of the working classes, who are the rulers of the land, somewhat checks the tide of labour. But the field for further development is a good one for emigrants of the proper sort. The climate cannot be over-rated; it can almost be said to be that of England divested of its objectionable characteristics. The passages are as to Australia. There are, however, direct ships, both sailers and steamers. The latter reach Auckland, Canterbury, Otago, and Wellington in about forty-five days, the former in about three months. There are no free passages. Those who have friends out in the colony should request them to nominate them, and pay a portion of their passage money. None but agricultural labourers are accepted by the Government. A small capitalist who can prove that he is possessed of over £100, and £50 for each member of his family over twelve, can go at a reduced rate. Forms for nomination are supplied

throughout the colony by the emigration offices. The rates of passage are as follow:—First class (steamer), £63 to £73; second class, £36 to £42 each; third, £13 to £15. Children under twelve, travelling with their parents, half price; infants under twelve months, free. Mr. F. W. Pennefather says, "It is sometimes said that money goes such a little way in New Zealand that all the advantages of increased receipts are lost by increased expenditure." Now, a methodical friend of mine in London told me the other day that he had calculated that living costs just thirty-three per cent. more than it would at home. I do not believe that any such line can be drawn. It depends upon the meaning attached to the word living. Most of the absolute necessities of life are cheap: mutton costs from 2d. to 5d. per pound, and flour 6s. per bag of 50 lbs. Firing is not so much wanted as in these colder latitudes, and New Zealand possesses excellent coal-fields in several districts. Education is free. Groceries and clothing, which are of course imported, are certainly tremendously expensive, but they form almost the only articles necessary to a settler's life. On the other hand everything beyond that—everything which may be defined as being on the border-land between necessities and luxuries—is very high in price: for instance, books, jewellery, pianos, carpets, &c. Still, it must be recollected that the mode of living is much more simple than in this country. There is plenty of friendliness, but little magnificence; abundant hospitality, but without ostentation. No one looks down upon honest work, or is too proud to join in a simple meal. Board and lodging of the cheapest style costs about £1 a week, rent being high. English money is current throughout the colony, and postal orders are issued. Several English banks have branches in the colony." The address of the New Zealand Agent-General is 7, Westminster-chambers, Victoria-street, S.W. Let us now turn to the minor colonies.

As regards BRITISH COLUMBIA, Mr. Henry Coppinger Beeton says (and as he is the Agent-General his words may be looked upon without fear):—"The climate of British Columbia is one of its most attractive features, being much more temperate than the climate in any part of Canada east of the Rockies. The inland climate very much resembles the south of England." Captain Vancouver, when he visited it, gave the following general description:—The serenity of the climate, innumerable pleasing landscapes, and

the abundant fertility that, unassisted, nature puts forth, require only to be enriched by the industry of man, with villages, cottages, mansions, and other buildings to render it the most lovely country that can be imagined; while the labour of the inhabitants would be amply rewarded by the bounties which nature seems ready to bestow on civilisation." The completion of the Canadian Pacific Railway, uniting the Atlantic and Pacific Oceans, has added greatly to the geographical and commercial importance of the whole Dominion, and must greatly stimulate the growth and development of her Pacific province. Within four and five days of Montreal, six of New York, and a fortnight of London, British Columbia has already begun to attract population, capital, and enterprise both from the Mother Country and the United States. The increase of population in the year ending 31st of December, 1886, was between 11,000 and 12,000; about a third of this number settled along the line of the Canadian Pacific Railway from Donald, in the Rockies, to Victoria. Of the remaining 7,000, more than one-half took up homesteads in the New Westminster and other districts on the mainland, leaving about 3,000 settlers for Vancouver Island, who would probably take up land in the agricultural districts of Cowchan, Nanaimo, Comox, and Alberni. Nearly 300 pre-emption records were issued for other districts, covering an area of about 50,000 acres. The next decade should see a much greater advance in the material progress of the province, particularly if the quartz mining proves a success. Dr. Edmunds, who has just returned, says that "he had very fair opportunities of judging the climate and of the prospect of any man who was worth anything at all making a comfortable home for himself there. He had seen a good deal of Canada, but British Columbia took his fancy immensely—the journey over the Rockies and down the Pacific Slope was one of the most magnificent to be found on the face of the earth. The climate was very different to that on the eastern slope. The width before reaching the ocean was much narrower, consequently the rivers ran more rapidly, and there were not the great level prairies to be found on the Atlantic side. The climate was mild, and very moderate in winter; quite a contrast to the extreme cold one gets on the eastern slopes and on the prairie country. In fact, the temperature was very much like that of the British Islands. Nothing could be more

beautiful than Vancouver Island. The stores of timber were practically limitless, and there was abundance of game. The English pheasant was introduced there six or eight years ago, and none were allowed to be killed until last year, by which time they had increased enormously. In the Nanimo mines the amount of coal was limitless; all that was required was labour—labour of an honest character, not that which went there merely to speculate, or enticed by gold mining, but men who would settle down in earnest, grow up with the country, and take their share of the wealth which they produced. Nothing he had seen or read of equalled the marvellous growth of the city of Vancouver. As he sat there at breakfast, facing Burrard's Inlet, and looked over the glorious panorama of three miles wide, with a grand land-locked bay twenty miles in length, deep enough for all orders of shipping, with an inlet of not more than one-third of a mile in width, through which the ocean flowed out of the Straits of Georgia,—he was charmed with it. And that peninsula only about a year ago was an almost pathless forest—with trees some of them as big as a railway train. He measured one which was 180 feet to the first branch, and six or eight feet in diameter. They had been cut down and the whole district cleared within about twelve months, the trees being burned to get rid of them. On that magnificent site a great city was now growing up, miles of splendid roads with fine solid stores, hotels, and villa residences, already built as if by magic, and he did not know any place where, if he were a young man, and capable of carrying on any business or starting a small shop, he would sooner go to. There was an enormous territory of fertile land, the fish were limitless in number; salmon were actually being swept up out of the water into the boat, and the whole country was capable of anything; the only requisite was an industrious population. The more one looked into the question of emigration the more difficult it was. He had never found any man that was good for anything who could not get a living in England; any man could get a good living here who knew what he was about, was thrifty, and worked hard. But if you took that sort of man to Canada or British Columbia he would get on much faster, and would go farther. He would soon become his own master, and if he invested his money in land, the unearned increment would be sure to make him a comparatively rich man. The moment you came

to the question of forced emigration the difficulty was how to view the question. Until very lately Canada had not made the preparation it was worth its while to make for the reception of emigrants. A man going out there had formerly about half a square mile of land given him, but it took him about eighteen months before he got any return from it, and meanwhile his little capital melted away. A large number of well-meaning emigrants spent their first summer in looking about for a particularly good plot of land, instead of settling down at once on some fairly good piece, where they would be pretty sure to do well. A number, too, wasted their money by getting into the hands of people who fleeced them in the sale of implements and things of that kind." One advantage of British Columbia as a centre of emigration is the fact that the "emigrant cars" of the railway are of a superior kind. On the Canadian Pacific Railway these cars are constructed on the same plan as the American first-class sleeping carriages, minus ornamentation, stuffed velvet seats, &c. The emigrant, with his mattress and pillow, can rest and sleep as soundly as his fellow-traveller in the drawing-room car, and perform the journey in the same time and with the same ease. Full information about British Columbia can be obtained from Mr. Henry Coppinger Beeton, 33, Finsbury-circus, E.C.

INDIA cannot be recommended as a suitable country for emigration, but it offers a good many advantages. It is true that its wheat crop cannot always compare with that of other countries of equal area; it is true that the climate is in some parts almost unbearable, yet it must not be forgotten that India has a very high yield in barley, oats, and rye. Many other crops are most successful. Tobacco, maize, indigo, ginger, tea, cotton, and root crops are cultivated with the best results. The fact that labour can be had from as low as 9d. a month is sufficient to deter the agricultural employé from seeking occupation there. Those who can get commercial or mining appointments in India, and stand the climate, receive excellent pay.

If we turn to CEYLON we find that everything in the island is improving, and that the remarkable development of the tea trade has rendered it a capital location for energetic young men with or without capital. Coffee, according to latest advices, is retrograding, though it is better than it was a few years ago. Cinnamon, tobacco, quinine, cocoa, and

other products form profitable farming. It is not advisable to go to Ceylon on the prospect of finding work. If one has a family or other connections well established in the island, it is well to join them. Several lines of steamers are available. The "British India," "Peninsula and Oriental," the "Queen," "Star," "Clan," and the "Messageries Maritimes" Lines all call at Colombo, the capital. Rates of passage: saloon, first class, £68; second class, £35; third class, £12 to £15. Hotels in Ceylon are exceedingly dear.

CYPRUS, much as it has been criticised, is by no means a poor place for the emigrant, and an enterprising man, who would be willing to wait for a good opportunity, might do worse than go there. The chief products are wine, fruit, coffee, tobacco, and a little cocoa. Living is remarkably cheap, and, if the emigrant is content to live healthily and modestly, the climate is not objectionable. First-class fare £21, third-class £10.

BURMAH is now attracting considerable attention among those desirous of emigrating. The climate has not a good reputation, but we are informed on the best authority that its evils have been much overstated. The occupations which are likely to open to Englishmen are the culture of india-rubber, opium, cotton, tobacco, silk, and tea. Forestry, mining, and agriculture are attracting much attention, and altogether those who are seeking a location for emigration will do well not to lose sight of this wealthy country.

The WEST COAST OF AFRICA is only suitable for those possessing enormously powerful constitutions. Those who can live there usually amass a fair share of fortune. Business is that of "trading" with the natives in palm oil, ground nuts, grain, ivory, the kola nut, and tropical fruit. The fares from Liverpool are—£40 first class and £17 third class.

The WEST INDIES, including Trinidad, St. Vincent, Jamaica, the Bahamas, the Leeward and the Windward Islands, British Guiana, and Barbados are not at all suitable for the ordinary emigrant. Though the islands are in by no means so depressed a condition as is represented by Mr. Froude, they are not in a sufficiently flourishing state to be able to stand importations of labour. Opportunities occur for young Englishmen and Scotchmen in the numberless commercial houses, but emigration of the pioneer order, or on the chance of picking up

something, is not to be recommended. Yet, as we found in the course of the inquiries made in the compilation of this work, it is the fact that a large number of young men go out year after year with the customary five-pound note in their pockets. Naturally they are exceedingly disappointed to find the business houses just as crowded as in London or Glasgow. Speaking generally of the West Indian colonies, we may say that Honduras is an improving colony; Trinidad, Jamaica, the Bahamas, and Barbados are "quite full up," as regards population; that British Guiana offers more scope than the other islands, and that the climate generally in the West Indies is not quite so black as it is painted. The constant consumption of "cocktails" and other pernicious drinks has more to do with the unhealthiness of the West Indies than the climate. Though salaries are higher, it must not be forgotten that living is expensive, and that extravagance is fashionable.

The UNITED STATES, so far as the eastern portion of that gigantic country is concerned, is not suited for the emigrant. Young America is so numerous, and commences life so very early, that every position is filled immediately. It is true that there are hundreds and thousands of Englishmen in New York, Boston, and other eastern cities, who are in receipt of excellent incomes; it is also true, unfortunately, that many belong to the loafing class. And when once a man becomes a loafer, it is exceedingly difficult for him to reform. The loafer is the greatest enemy the young emigrant has to face. He is to be met with in every portion of the globe. Usually he has left England or Scotland with the best of intentions, but has found on arrival that work is not so plentiful as he had expected, and so he gradually drifts from disappointment into drink and idleness, and thence to vagabondage. Every young emigrant should steer severely clear of the loafer. He is frequently well enough dressed, for he has often well-to-do relations at home who send him out occasional remittances. He can generally be told by his manner of deprecating everything in the colony or country. To return, however, to the discussion as to the best portion of the United States suited to young Britons. Out West there are abundant opportunities for all. Work is plentiful, wages are high, and, if the life is rough, employment is certain. Those intending to pursue agriculture as a vocation should proceed to Upper Iowa, South Minnesota, South

Wisconsin, Kentucky, and East Kansas. This last is one of the most fertile territories in the United States. Those who are seeking a good climate cannot do better than go to Arizona; for mining, Colorado is best; and New Mexico offers great advantages to those prefering a life of adventure. In the Western States land can be bought for from 6s. to £1 an acre. The American Homestead law will not permit it to be purchased in less lots than those of 40, 80, 120, and 160 acres and upwards. Young fellows with small capital do best to begin with 160 acres, and work up from that; too much should not be attempted at first. The fees to the Registrar, on taking possession, amount to about £3 14s., and after five years about 10s. more is paid. The United States have a "smart" method of obtaining naturalised citizens by giving the benefit of the Homestead Law only to those who make a declaration of their intention of becoming United States citizens. The land must be taken up and worked; the owner cannot absent himself for any period exceeding six months. On no account should land be bought until it has been seen by some person competent to judge, as much of it is frequently quite valueless; and no one should purchase land who has not received some sort of agricultural education, either in England or America, the latter for preference. The staple products of the agricultural states are corn and wool, for both of which markets are obtained, and prices are fairly steady. A good manager will always combine with his chief products of wool, lambs, cattle, or corn, the most suitable minor produce, such as vegetables, fruits, hops, and peas. With sufficient wheat and wool, this production could be advantageously combined. Stock farming should not be done in company with these until the farm is well established, and ample space secured. A friend who has gone through the mill himself writes: "Inexperienced men should invariably give a year at least at an established farm to begin with. Should the farm be a really big one, they would have to pay a premium of from £50 to £80," but, as has already been mentioned in this work, premiums must always be paid with caution.

SOUTH AMERICA is in parts eminently suited to Englishmen. The notion that revolutions, civil wars, and other internal disturbances are always taking place there has a slight foundation in truth, but no more. To the Briton accustomed to one of the most stable governments in the

world, and who has been educated to believe that property has its rights, the very suggestion of a civil war is sufficient to deter him from sojourning in South America.

The most settled State of all is BRAZIL. Brazil is but too little known to the English. It is one of the most wealthy countries in the world, and its inhabitants are well disposed to us. Consisting of twenty provinces, with almost as many climates, its products are almost unlimited. The heavy duties have hitherto been a great drawback to settlers, and have indeed deterred many from going to Brazil. The system of long credits which prevails in most parts, and in the provinces in particular, have rendered necessary the exercise of great caution on the part of new immigrants. Now that cocoa is becoming one of the universal drinks of the world, a cocoa orchard is a very remunerative piece of property. An orchard can be purchased at the rate of 8d. to 10d. a tree. Grazing is one of the great industries of Brazil. Pasture land can be purchased freehold at the remarkable rate of 3s. an acre. Next to cocoa culture, the planting of oranges and vines is a promising industry. Sugar does not do well; it is a depressed trade in this, as in most other parts of the globe. Tobacco is only a fair crop. Indiarubber is a profitable industry, and cotton is highly successful. The English population is large, and there are many Brazilians whose fathers or mothers were English. The fares are—to Pernambuco, £30; Bahia, £30; to Rio de Janeirio, £30; Santos, £30; the third-class fares are about £10. The ports are reached by frequent steamers from London, Liverpool, and Southampton. The passage occupies from between sixteen and twenty-five days, and the best lines to go by are the Pacific Royal Mail, and the Liverpool, Brazil, and River Plate. The Consul-General for Brazil, 6, Winchester-buildings, London, E.C., will give full particulars.

MEXICO is now opening up to English emigrants. The Germans have been going there for years, but the English are only now finding what a rich field it is for capital and labour. Coffee, cocoa, indigo, indiarubber, cochineal, rice, and maize flourish. The best route is *viâ* New York, the price of a passage from that city being 35 dols. (£7). This, of course, is in the steerage.

COLOMBIA, CHILI, and PERU, on the Western Coast, are all suitable spots for adventurous emigrants. We cannot recommend families to go there, but young men of

enterprise and energy are almost certain of success. There are a large number of Englishmen there, and most of them are doing well. The climate of Chili is particularly suited to all the white races, and with a few years of improved administration, such as is now hoped for, this country will be well worth attention. Peru is a capital country for the agriculturist, and the mere labourer, more especially if he is fairly skilled, will find good pay. The next few years will almost certainly find a great increase in the number of settlers in the State of Colombia. When the Panama Canal is opened—if it will ever be opened—the tide of emigration is almost certain to pour in. Railway communication is a great want throughout the States, but the increased trade will necessarily supply it, and the English population is already crying out for better means of transit.

Of the WESTERN ISLANDS little is known. Properly, the term applies to the Azores. Madeira and the Canaries are also included. Each is worthy of notice by those of delicate constitutions, as they offer a remarkably equable sub-tropical climate within a short distance of England. At the Azores, garden produce is the chief source of income. The climate is highly favourable for the production of all European vegetables; the direct communication with England is not yet very good. In Madeira the staple production is wine culture, which has entirely recovered itself within the past ten or twenty years. Sugar is also grown in small quantities. Oranges, tobacco, and other products do not succeed. Fresh vegetables are producible all the year round. First-class fares are £12 to £15; third class £5 to £7. The coinage is Spanish.

In the CANARY ISLANDS the two principal islands are Teneriffe and Grand Canary, both in regular weekly communication with England. The staple product in past years has been cochineal, but this has given way to tobacco, which much resembles that of Havanna. Oranges, vegetable products, and wine are also successfully cultivated; the latter has not yet been fairly revived. The climate and soil are admirably suited to the purpose. Enterprise offers good prospect to those possessing moderate capital. Land is obtainable at £5 per acre. The fares from Liverpool are £16 first class and £8 third class. The language and currency are Spanish.

Reports as to the state of employment in JAPAN have

been so varied, that it has been with great difficulty that we have obtained the following information. The climate is not unlike that of England, and the chief occupations of European immigrants are in mercantile houses. Tea is rapidly increasing as an article of produce, and silk is very successful. Mining is a branch of work which has absorbed considerable capital and labour, and pays well; and as railway communication increases, the general prospects of the country are likely to improve. Yokohama, the chief port, is reached from England by the Eastern route *viâ* the Suez Canal, Colombo, and Hong Kong, or by the Western *viâ* San Francisco. Emigration is not desirable unless employment awaits the settler.

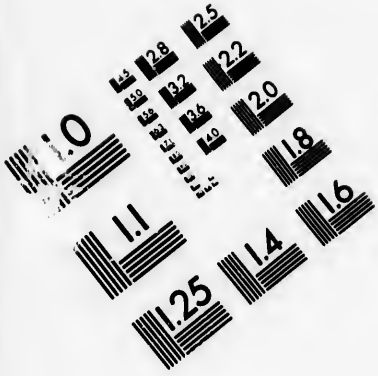
EMIGRATION FOR WOMEN.

Of far more importance to the individual than emigration for men and young men is emigration for women, and more especially women of the middle classes. We may at once say that there is no hope for governesses, needlewomen, and merely mentally educated women in the Colonies. They are not wanted. Our colonists are wise enough to educate their women themselves, and they only require cooks and other domestics. A young woman who is able to bake, sew, cook, and wash, and is well up in housekeeping, can in almost any colony get along well enough. There are two societies which deal with emigration for women: the Female Middle-Class Emigration Society (hon. sec., Miss Blake, 187, Fulham-road, S.W.) occasionally helps young women of the middle classes who are sufficiently educated to become nursery governesses. To suitable candidates it advances the passage money, and finds them occupation on arrival in the colony. The society has correspondents at most of the colonial towns, and we have no hesitation in stating that it is one of the most practical and deserving associations for the assistance of women existing. Another society which also can be favourably mentioned is the Women's Emigration Society (hon. sec., Thomas Tulley, Esq., 12, Carteret-street, Queen Anne's-gate, S.W.), which has done much good work of a similar nature, and can be recommended. Both these societies are self-supporting, and neither makes any profit. Assisted passages to the colonies for women are no longer granted. Western Australia takes a few, but is not on the

whole so desirable a location as many others. Wages of domestics in Australia are as follows :—Cooks, £30 to £60 a year; housemaids, £20 to £35; generals, £30 to £40; nurses, £20 to £30; nursemaids, £15 to £25; waiting maids, £20 to £40—hotel servants a little higher; ladies' maids, £20 to £40. Beer money is not given. There is some variation in the various colonies, but these wages apply fairly to Australia, Canada, and the Cape. For passage, see the foregoing article on emigration.

ENGINEERING.

In the minds of the great general public, engineering is anything from stoking a donkey-engine to constructing a bridge across the Thames. The profession is indeed a large one, and, like the Bar, it is full of great promises. We will first deal with CIVIL ENGINEERING. To be a successful engineer, it is necessary to possess what is known as the mathematical temperament. But we would warn parents against a merely theoretical education. The groundwork of algebra, statics, trigonometry, dynamics, is of great value—of more value, we venture to think, than the calculus; but to be able to tell good stone from bad, for building, is of more use still. We would recommend the thorough study of appearance, qualities, price and advantages and disadvantages of all materials in works, the markets, the cost of labour, and the systems of employment; in addition, the relative value of materials at home, in the colonies, and abroad, should be thoroughly mastered. Experience, it may be argued, is the only real way of getting this knowledge. We think, and indeed have reason to know, that a firm foundation may be made beforehand, if the student knew how, when, and where to look for it. The more modern schools of engineering now give a thoroughly practical education. The following schools of engineering can be strongly recommended :—The Royal Indian Engineering College, King's College, London; Cooper's Hill, the Crystal Palace School of Engineering, the Bradford Technical College, the Edinburgh School of Arts, the Technical College and Allan Glen's Institution, Glasgow; the City and Guilds Institute, London; and Schools of Technical Art, Kennington-park-road; the Technical College, Finsbury; the Normal School of Science, Jermyn-street and South Kensington; Royal School of Mines; the Colleges of



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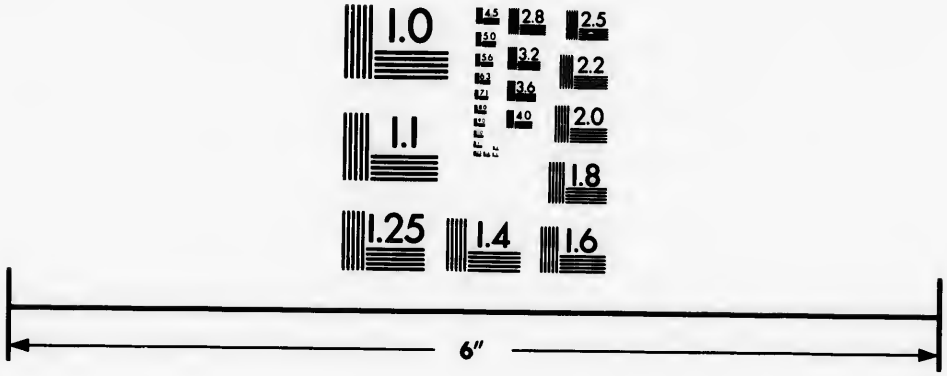

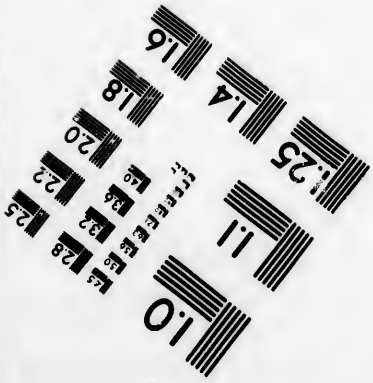

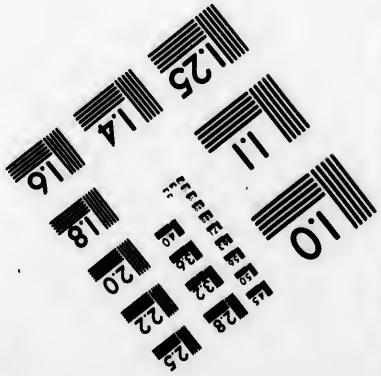

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Sciences for Ireland, Dublin, and Cork, the Manchester Technical School, the Newcastle-on-Tyne College of Physical Sciences, University College, Bristol; Hartley's Institution, Southampton; and many local universities. In the majority of these a similar course of instruction, extending from one to four years, is provided, with laboratories and shops for practical work. Special scholarships and exhibitions are open to all for competition. These are tenable for from one to three years. An engineering education is not a dear one. At King's College, London, the total for a matriculating student attending the full course amounts to from £48 to £50 per annum. This is reduced to from £38 to £40 in the case of boys who have been educated at King's College School. All special subjects may be taken up by non-matriculating students. The charges vary from £5 to £10, or £1 1s. to £4 4s. per term. At the Crystal Palace School the charge is £60 per annum; the City Guilds, £30; the Normal Schools, £30 to £40; Finsbury College, £10 per session; Cooper's Hill (for the special training of engineers for India) £180 per annum, including residence and board. The scholarships are from £30 to £50 per annum, so that they may be taken to amount to a remission of college fees, or thereabouts, in most cases. Sir Joseph Whitworth's scholarships, open to competition to all British subjects, are of the value of £100 to £150, and £200 yearly, for mechanical students not over twenty-six years of age. In all the above-mentioned cases the complete course comprises more separate subjects than any one student could expect to handle thoroughly. In most cases he will give his chief attention to one or the other, according to his inclination for any particular branch of the work. It is preferable to do this, as far as the routine will allow. Many facilities are afforded to, for instance, "the occasional" student at King's College, for the selection of those specialities having a concern for each individual, so that he may, if desired, give his whole time to two or three subjects, instead of dividing it over the whole curriculum. There is always a temptation to rush into anything which includes manipulation as well as brain power; we may warn the student that however less attractive the subjects of pure study may appear than the practice, they cannot wisely be quite sacrificed. A knowledge of a single equation often saves hours of work in the field or workshop. After completing the college course, let us add

that, at the age of eighteen or nineteen, the student will never do wrong in devoting at least a year to the mechanical work in the "shops." In the highest branches of constructive engineering he will find it a stand-by throughout his professional career. Should he have been well beforehand with his time, there will be ample left for these purposes; and if the next stage of training is intended as pupil to a civil engineer, there can be no better experience than that of the larger locomotive works. At the leading works in Great Britain almost every phase of industry is included, from the manufacture of ingot steel down to the most finished details of locomotive work. Boiler work, general rolling stock, station and bridge, and even marine work are often included in the operations of one such establishment. The division of a year's work between the machine and erecting shops would be of enormous value to the engineer later on. The following are the leading works of this class :—The works of the leading railways, the Great Northern at Doncaster, the Great Eastern at Stratford-le-Bow, the Midland at Derby, the London and North-Western at Crewe and Wolverton, the Great Western at Swindon, the London and South-Western at Nine Elms, the South-Eastern at Ashford, and London, Chatham, and Dover at Long-edge. At the above works the locomotive superintendents are empowered to receive a limited number of premium-paying pupils, who, however, are expected to observe the hours and do the work allotted to them, and not merely to go about the works as spectators. The large factories, such as those of Sharp, Stewart & Co., Manchester; Beyer & Peacock, Manchester; the Avon Side Company, Bristol, and Messrs. Neilson & Co.; also for similar experience we might mention the works of other general engineers, of which those of Sir J. Brown & Co. are an example. At the largest works the premium is £100 for a year's pupilage.

But we will now proceed. The ordinary plan is to pay a premium to an engineer in active practice, usually covering a period of three years. The premium paid may vary from £50 to £100, up to £500 or even £1,000, according to the professional status of the engineer. £300 for three years' pupilage is a very usual premium with engineers of recognised position. A portion of the course, generally the first year, is devoted to the drawing office. Here the pupil will become

familiar with the details of the work in hand at the time, and will be entrusted with manipulating plans of design, preparing estimates, and taking out quantities. He will then be placed upon out-door work. As this will be of a preliminary character, it will enable him to take up the practice of surveying, levelling, and setting out works where he left it at school or college. A really smart pupil should be able to make himself worth a small salary before the expiration of his term. In the course of our inquiries we found that a large number of young fellows are able to get back much of their premium during their "time." A somewhat important question with the young engineer is that of instruments. The majority will wish to get them cheaply. Most offices will provide them, yet we would strongly advise all to provide themselves. Everyone knows that it is always more pleasant to work with one's own tools than with those of other people. A fairly complete set would be as follows: A transit theodolite, drawing instruments and accessories, a surveying chain, a level, and a staff and accessories. The cost depends entirely upon the maker. A complete, strong and serviceable set could be had by a sharp purchaser for £50, or even less. Second-hand instruments, if by a good maker, would also do. But there is one requirement which no amount of money can purchase. It is that of a sound constitution. For the engineer's life is a trying one; he must be up early and late, in all weathers and in all climates. Young engineers can generally get foreign appointments on the expiration of pupilage. The salaries and appointments on railways and marine, and upon hydraulic works in England are from £300 to £1,000 per annum. Naturally, these are not numerous. In the case of established undertakings like the railways, the regular staff is continually working up from the ranks. The introduction of an outsider is not therefore usual. On the Indian State and other railways the chances of occupation lie within much the same limits, though the field is far wider. New men usually go out on a three or five years' engagement in third grade appointments, after which they will probably have the opportunity of rising to second or first-rate positions on works in construction, or of remaining on a permanent staff. The making of a private practice is in this country, as in most others, a question of capital. In England it is attended with much uncertainty, as works of any importance

involving considerable expenditure, are, as a matter of course, entrusted to tho. of the largest experience only. It may be further taken as a general rule that an engineer in this country who is attached to established works or undertakings will do wisely to retain his position, unless he has a really good opening in some other country.

The education of a MECHANICAL ENGINEER involves a different course to that of a civil engineer. It is more limited in its general scope, and differs from civil in comprising a larger number of specialities, for each of which a special study is required. Assuming, as we did before, that the student has passed from general schooling into the preparatory course at one of the colleges of applied science already referred to, we shall point out the chief subjects in which it will be advisable for him to vary his work from that of a civil engineer. Having abundant time before him to devote to purely mechanical work, his best plan would be to give a considerable portion of his college training for, at any rate, the first two years, to a thorough theoretical grounding. There is a general tendency to overrate the value of pure mathematics to the engineer, and to assign too much importance to it; but in after-practice he will find it far more useful to have given the same time to becoming thoroughly familiar with the elementary principles, which, especially algebra and trigonometry, should be at his fingers' ends. The machinist, in particular, is more concerned with the science of motion and power than with statistical philosophy, and should be guided in his mathematical studies accordingly. In the knowledge of materials study of metals becomes of primary importance, and the foundation of future practice in the working of metals should be acquired by a thorough acquaintance with all metallurgical processes from the very beginning, especially those relating to steel and iron. He will find himself frequently at fault in the task of the production of metals, and its value has been now fully recognised in the schools of mechanical engineering lately. The course at King's College, London, has of late years included a special series of lectures and demonstrations on metallurgy, which are worth the time given to them; elementary chemistry (especially that of metals) and mineralogy are also of special importance, with particular reference to laboratory work and inorganic analysis. The

principles of all these questions should have the earliest attention, and even the manipulation of the workshops may give way to them to some extent for a time. The student will have plenty of that as he advances. If a student begins his training early enough, he would, of course, lose nothing by going through the first year's course of civil engineering and learning all he can. It generally happens that those who go in for mechanical work have some speciality in view, which is determined by their individual opportunities. Such a proposition is certainly to be desired, and the student would direct his training towards his speciality.

We will deal with ELECTRICAL ENGINEERING under this head, because it has now fairly earned the distinction. The TELEGRAPH, TELEPHONE, ELECTRIC LIGHT, and other services of America, Great Britain, the Colonies and abroad, now give employment to many thousands. The study of electricity and its practical application is always an interesting and encouraging exercise, from the fact that it is work which is always increasing in volume. It will, ten years hence, give employment to many thousands more. One should begin to train for this business (or profession) as soon as possible after ordinary schooling. The ages of 15 or 16 are not at all too young. No one should enter upon it who is not thoroughly and enthusiastically in love with the work, who has not an aptitude for mechanics, is not neat, and has not a quick eye, hand, and brain. He who makes up his mind to become an electrician must not look forward to any particularly interesting work for some time. A very great deal of the electric engineer's work is dry and dull. On the other hand, there is much that is intensely interesting. The rapid extension of telegraph, submarine cables, telephones, telephone lines, exchanges, electric light circuits, and power have opened up a splendid field. Most of the schools and colleges named in the section of this work devoted to engineering provide electrical education. The following make a speciality of it, and the two last are devoted entirely to it :—King's College, London University College, the City and Guilds Institute, Finsbury Technical College, the Central Telegraph Electric Engineering School, Railway Approach, London Bridge, and the School of Submarine Telegraphy and Electrical Engineering, 12, Princes-street, Hanover-square. Except at King's College and the Technical Electrical Schools the instruction is more scientific than practical. At

King's College the physical laboratory is opened during each college term on every day from one till four for practical study and research. The practical course depends upon previous knowledge. The fees are :—Two days a week : four guineas a term, or ten guineas a year. Five days a week : ten guineas a term, or twenty guineas a year. At the Central Telegraph Electric Engineering School, Railway Approach, London Bridge, a considerable number of post office, press, railway, mercantile, and private telegraphists are trained. At the School of Submarine Telegraphy and Electrical Engineering complete apparatus is provided for practice in all telegraph operations as they are conducted in the offices of the various companies. The course is rather over twelve months in length. It concludes with an examination in general proficiency, and those who get 70 per cent. or upwards of the total marks in this examination, receive the vellum certificate of the school. This is of recognised value in the profession. Those who hold it are placed upon a register. They may be recommended for vacant appointments, of which a considerable number are held by pupils. The Eastern Telegraph Company accept the certificates of this school without further examination. The names can also be entered on the company's list if desired before going into the school, with a view to further appointments as they may be open. None are made under seventeen years of age, and in all telegraph services appointments are made according to proficiency. There is also a fair prospect of appointments in connection with the lighting, power, and insurance companies, in which the salaries range from four hundred up to five hundred or often a thousand a year. We should say that these salaries are exceptional. For the Postal Telegraph Service instruction is given in the Post Office itself. Candidates are admitted from time to time for competitive examinations. Promotions to the superior positions are made as vacancies occur according to proficiency. Telegraph learners in the General Post Office in London, Dublin, and Edinburgh are appointed in the following manner. As often as learners are required, advertisements are inserted in leading newspapers announcing forthcoming competitive examinations. The limits of age are from 14 to 18 for male, and 15 to 18 for female learners (see Telegraph Learners). The most attractive branches of electric work are the Submarine and the Railway. Some notion of the

extent of the railway telegraph service and the interesting nature of its work may be obtained from a shilling book entitled "All about Our Railways." What is known as ELECTRICAL ENGINEERING is the making and fitting of dynamos and the installation of light and power services. Many private firms of electrical engineers receive pupils on the principle adopted by mechanical engineers, fully explained in the section of this work dealing with that subject. At present the law relating to lighting and other companies is somewhat inefficient, and improved legislation will place the electrician on a much better basis than he occupies at present.

ENGINEERING STUDENTS (in Dockyards).

Parents of foresight should take the opportunity of considering the question of making their sons engineering students. The basis of the preliminary arrangements is an examination, and vacancies are filled by both nomination and competition. The Board of Admiralty select a limited number of sons of officers in the Navy, Army, or Royal Marines who have been killed in action; those whose parents have been lost at sea while on active service, who have been killed on duty, or who have died of wounds received in action, or injuries received within six months from the date of such action or injury, or from sons of officers of the Navy or Royal Marines who have performed long and meritorious service. One-fifth of the total of engineering students only are elected by nomination, the remainder enter by competitive examination. The age limits are from 14 to 16. A candidate must not be less than the former age or more than the latter on the 1st of May in the year in which he is examined; and he must be prepared to bring good evidence of character and age after the examination. The physical examination is rather a severe one. It would therefore be useless to enter a lad who was not fully competent in this respect. Imperfections of utterance are regarded as disqualifications. We may state briefly that the medical examination is similar to that undergone by candidates for the Naval Service. The nominated candidates are obliged to acquit themselves creditably in a test examination in which the subjects are arithmetic, dictation, and handwriting, and they must obtain 700 of the 1750 marks awarded at the competitive examination. The examinations

are held at London, Liverpool, Portsmouth, Devonport, Bristol, Leeds, Newcastle, Edinburgh, Aberdeen, Dublin, Belfast, and Cork. They take place every April. The competitive subjects are as follows :—Arithmetic, maximum (300), handwriting (40), accuracy and intelligence in writing from dictation (60), composition (100), grammar (150), and for French, German, or Latin 150 each; geography (100), algebra up to and including quadratic equations (300); Euclid, Elements, books 1 to 4, book 6, and the definition of the 5th book (300); elementary mechanical drawing (100): this consists of the construction of plane scales and the use of simple mathematical instruments, as shown by the neat drawing of plane geometrical figures to scale. Candidates who succeed become students not later than the 1st of July, when they have to join with their parents or guardians in a bond of £300 to enter, if required, as assistant engineers in the Naval Service, supposing that at the expiration of their training they obtain certificates of good conduct and efficiency. The parents must also make four yearly payments amounting in all to £100—£30 for the first two years and £20 for the last two. Board and lodging with medical attendance are provided by the Admiralty, and the young student gets a weekly wage at once. The first year he gets 1s. a week, second 2s., third 3s., fourth 5s., fifth 8s., and the sixth 10s. The only necessities the parents have to supply are clothing, washing, &c. The student works for six years at one of the dockyards, and receives instruction in shipbuilding, in addition he is instructed in drawing, and receives a fair education in naval engineering. He is thoroughly taught the working of marine engines and boilers, and practical use of the instruments of the engine-room. He is examined each year by the President of the Royal Naval College, and at the end of the fourth, fifth, and sixth years has other examinations to pass, in which his knowledge of steam machinery is tested. The engineer student, if he earns 50 per cent. of the marks, receives a qualifying certificate at the Royal Naval College. Here he passes through a higher course of instruction in the various departments of civil engineering, which have to be traversed by the student.

ENGRAVING.

The invariable result of our inquiries into this profession was the answer that various mechanical processes had super-

seded all but the highest class of work, and that in consequence many clever engravers were now seeking employment in other walks of life. Engravers take apprentices and pupils at premiums varying from 40 to 200 guineas. For a youth possessing artistic talent, and firmly bent upon following this occupation, it would be well to apply to one of the engravers whose name will be found in the London Directory. None but those with distinct artistic tastes and strong eyesight should attempt this work. Engravers earn from £1 10s. to £20 a week. Women make successful engravers. At 122, Kennington Park-road there is a school of wood engraving. Girls over 16 are admitted. Private classes are held at 3, East Temple Chambers, Whitefriars-street, by Mr. Patterson.

ENGRAVERS OF GOLD AND SILVER.

This is not so remunerative as it was formerly, owing to the fact that machinery has considerably superseded hand labour. Still, those of original artistic tastes can always earn from 25s. to 4[illegible] week, after undergoing a course of training of from three [illegible]e years' duration.

EXAMINATIONS (HOW TO PASS).

The well-known scholar, Mr. A. C. Dixon, who is a senior wrangler, and a learned man generally, talking of examinations recently, said that, though many people grumble at the examination system of the present day, everyone knows that the passing of examinations is nowadays of the greatest importance in certain walks of life, and that, in fact, some walks are shut to those who fail to pass. Mr. Dixon summarises the art of passing examinations briefly as follows :—The first thing needful, he believes, is a thorough knowledge of the subject matter. But, he says, somewhat humorously, as the art of getting through without that knowledge, though it gives scope for many fine qualities, and may perhaps be called a fine art, has yet a smack of learning about it, and as the object of the examination is to test that knowledge, we will take a moderate amount of it for granted, and ask how it is to be turned to the best account. He believes that the first principle is that one should be in the best of "form" at the time of the examination. Care should be taken that all colds, bilious attacks,

and other ills should fall after the examination. Hunger is not a help to work, and the examinee should be careful to have a good breakfast and a good lunch, if, as is usual, there are three hours in the morning and the same in the afternoon. The second principle to be considered, he says, is that the examiners are human, and that it is better to please them than to displease them. He is of opinion that they might prefer writing that can be read to writing that cannot, and that they like a neat page much better than one that is beautified by blots and crossings out. It is often better, on finding out a mistake, to take a new sheet and begin again than to patch up the old. It is also wise to remember anything they may have said as to folding of paper, and leaving of margins and the like. If a candidate finds that a question is wrong, the best thing he can do is to say so, and give his reasons; at the same time doing his best to keep the examiner's dignity unruffled. Nothing, Mr. Dixon remarks neatly, is gained by "scoring off" an examiner. It is a good thing, says this senior wrangler, to try to find out the name of an examiner, and read any books he has written upon the subject in which you are to be examined, so that you can get an inkling as to the grooves in which the examiner's mind will run. It also follows, from the humanity of the examiners, that the candidates will not get marks for what they knew but had not time to write down; for the examiners will have no means of finding out what they knew except by what they have written down. It is therefore important that they should write down all they know. To this end they would do well to begin with what they are sure about, and leave more doubtful matter till after. Other things being equal, the faster one can write the more one can get down in a given time. In fact, it is said that one of the most famous of modern English mathematicians was beaten in the "Tripos" by a rival who had practised fast writing for some weeks beforehand. It is well to use the same kind of pen in the examination that one generally uses outside, and not to use quills simply because they happen to be on the table. In conclusion, Mr. Dixon calls the attention of candidates to the fact that where there is a *vivâ voce* as well as a writing examination, examiners are fond of testing candidates on points which their papers show to be weak; and that it would be therefore folly in the candidate not to look up the weak points that he showed in his papers.

FACTORY HANDS.

Employment in factories is obtained by applying to the foreman or time-keeper. The circumstances and remuneration differ so much in every branch of the work that no definite statement can be made in regard to either wages, hours, or work.

FEATHER MAKING.

This is a pleasant and easy work for young girls. It fluctuates, however, continually, but has shown improvement during the past few seasons. The wages vary from 3s. 6d. to £1 a week, and the working hours are usually ten a day. Application should be made to leading feather makers in large towns.

FRUIT FARMING (see Agriculture).

This occupation, which is highly recommended by Mr. Gladstone, has greatly increased since 1882. It must be remembered that market gardening and fruit farming are attended with much risk, and the competition is now excessively keen. Still parents could do much worse than place sons of agricultural tastes with market gardeners or fruit farmers in a large way of business. Some of the leading firms in the neighbourhood of London take apprentices and pupils, with premiums varying from £50 to £100 a year, including board and lodging.

GATHERING BOYS (see Printers).

GIRLS' PUBLIC DAY SCHOOL COMPANY'S TEACHERS.

Teaching has now almost assumed the dignity of a profession proper. During the past few years the number of ladies who have chosen this vocation as a way to earn a living has marvellous increased, and there is, in the higher branches, plenty of room for fresh aspirants. The Girls' Public Day School Company has opened up quite a new branch. It pays its teachers well, treats them well, and, as it is ever increasing its staff, it will always afford employment. At the present time it has nearly forty schools in working order, and it annually educates more than 7,000 young

ladies. It gives its head mistresses what would a few years ago have been regarded as princely pay—from £250 per annum, and capitation fees. Numbers of its mistresses are leading educationalists. The capitation fees are £1 10s. for every pupil above the number of 100 up to 200, and, for every pupil in excess of this latter number, £2. Assistant teachers are appointed by the Council, in the greater number of cases on the recommendation of the Committee of Education. The candidate will, in the first instance, refer to the head mistress of a neighbouring school. Her testimonials will then be examined, and inquiries will be made as to her qualifications. The testimonials are then generally laid before the Educational Committee. The Committee interviews the candidate, and submits her for the approval of the Council. The Council defrays the cost of travelling to and from the interviews. Assistant teachers are received on probation for the first two terms of their engagement; at the expiration of either term the head mistress can retain or dismiss the assistant without consultation of the Council. A month's notice is given. On the conclusion of the probationary period, the assistant will be placed upon the permanent staff, at the following rates of salary:—The salaries commence at from £75 to £135 a year. Annual increments are given for the first years. These increments vary from £8 to £15. The average salary is said to be about £130. In considering these salaries it should be remembered that board and lodging are not granted. The qualifications are generally as follow:—Arithmetic, English grammar and composition, one or more foreign languages, and a knowledge of the art of teaching. A knowledge of drawing is considered an additional qualification. Candidates are recommended to pass one of the higher University "Locals." The London Matriculation Examination also stands high in the estimation of the Council. Applications should be made by letter, marked "Application for Assistant Mistresship." Age, experience, and qualifications should be stated, and copies of testimonials should be forwarded. As before suggested, these should be forwarded to the mistress of any school for which the candidate has a preference. If the candidate has no preference she should address her application, marked in the manner described, to—The Secretary, Girls' Public Day School Company, Limited, 21, Queen Anne's-gate, S.W. A number of mistresses for the

teaching of harmony, music, singing, the piano, drawing, languages, calisthenics, science, mathematics, &c., are engaged, and applications should also be addressed to the Secretary. The vacancies generally occur during March, June, and November.

GLASS MAKING.

There are few occupations which show such numerous varieties as those in which glass is manipulated; for even in the production of the raw material, some four or five kinds of glass are made, all of which differ materially in the processes of manufacture and the conditions of the operative. The four principal branches are those of plate, crown and sheet, flint, and bottle glass, all of which have their varieties and subdivisions. The chief localities are London, the Tyne and Wear for flint and plate; Birmingham for plate, crown and sheet; Castleford for bottles. The plate glass, as is well known, is made for smooth surfaces, such as mirrors, and shop windows; crown and sheet for ordinary window glass; flint for ornamental work where diversity of form is required, such as lamps, table glass, medical and perfumery glass; while bottle is used for wine, beer, pickles, &c. In flint-glass factories the men and boys work in sets of four, viz., the workman, the servitor, the foot-maker, and the taker in. Foot-makers are generally apprentices learning the trade; though for the best work journeymen foot-makers are generally engaged. A foot-maker does not expect to be promoted to be a servitor until he has been at work in the trade many years, and a workman is generally advanced in life before he attains that position. A workman makes from 2s. 5d. to 3s. 9d. per "move," a servitor 1s. 11d. to 3s., and a foot-maker from 1s. 2d. to 1s. 7d. In the Birmingham districts glass makers usually work fourteen, sixteen, or eighteen moves per week. In glass cutting the wages average from 25s. to 35s. per week of fifty-four hours. Glass engraving and etching afford occupation of a higher grade, and those who work at it can make £3 or £4 per week. The operatives work by the piece, and in their own shops, having their own apprentices. Women work at roughing, cleaning, &c., and earn from 6s. to 10s. per week.

GLASS PAINTING.

Glass painting needs a very thoughtful training, and much artistic ability. After a boy has attended a School of Art for

some time, if his parents have the means, he may be entered at any of the leading Stained Glass firms as an articled pupil for a premium varying from £30 to £50. But, as a rule, a youth thinking he has the natural aptitude for this profession should apply personally, and request to be taken on. He will have to give two months, during which time he receives no wages, but merely proves whether he is suitable for an ornamental draughtsman. If he undergoes the ordeal satisfactorily he will be taken on and paid 2s. 6d. a week; if a premium has been paid with him, 5s. In the course of two or three years he may rise to 7s. or 8s. When out of his time an ornamental painter may earn 30s. a week; the highest wages are paid to figure painters, £2 2s. to £2 10s. being the average, but a very good hand may receive £3. As in other professions, all depends on ability. Since stained glass windows have been so freely used in private houses, many women are employed in this branch of artistic work. An apprenticeship of from three to four years has to be served before the employment becomes remunerative. Nearly all the stained glass manufacturers will now take women apprentices, but the premium is always high.

GLOVE-MAKING.

Messrs. Dent, Allcroft & Co. employ from 10,000 to 15,000 women in the counties of Worcester, Hereford, Oxford, Somerset, Devon, and Gloucester. From 300 to 400 work in the factory at Worcester, the rest at their own homes, and glove-making in the above-named counties is one of the most important sources of female income. The women in the factory work eight hours a day, for the most part at sewing machines driven by steam, and earn from 10s. to 15s. a week. The glove-making counties are mapped out into circuits, and the firm employ a number of clerks who have each their own district. Round these they travel every week, taking with them a cart-load of gloves. The glove-sewers of the district assemble at a fixed place—generally at the village inn—and receive their work, which they take home, and bring back again the next week finished. They earn from 5s. to 8s. per week, which is the pay for one to two dozen pairs of gloves. The employers generally supply the machines and the thread, the needles are found by the women. Prices for sewing gloves vary from 2s. 6d. to 6s. 6d. per dozen, according to

the nature of the gloves, and whether the work is done by hand or machine.

GOVERNESSES.

It is fortunate that the demand for governesses increases, in some measure, with the supply. The creation of a wealthy middle class has opened up a field of magnitude to the governess. The first qualifications of a governess are a really excellent education, consisting at least of the following:—English, French, some German, arithmetic, writing, drawing, music, singing, and, if possible, Latin. Properly introduced, a lady with these qualifications can always command a high-class appointment. She would receive from £50 to £100 a year, and, in a few exceptional cases, as much as £150 is paid. Though this cannot be said always to be equivalent to the qualifications expected, it must be remembered that the governess is well housed and fed, and in many cases treated with respect and consideration. The treatment a governess receives depends upon her employers, and, it may be added, upon herself. In the families of the "upper classes" a governess is frequently treated as a friend. Governesses of the second grade are not so well qualified, and receive from £30 to £50 per annum. Nursery governesses receive the pay of housemaids. There are a number of institutions which provide situations for governesses, and there are many others (private speculations) which do so on payment of a fee or commission. These last will be found advertised in the principal London papers. The Governesses Benevolent Institution, 47, Harley-street, provide situations on the production of references; the hours are from 12 till 5. In Scotland there is an excellent society known as the Northern United Registry for Governesses; it has offices at 6, Queen's-terrace, Edinburgh; 5, Chester-street, Glasgow; and also at 14, Stonegate, York; and 14, Albion-street, Leeds. The fees amount to 2s. only for situations. There are numbers of Homes for governesses where they can live comfortably when not employed. A few of the more reliable are as follows:—The Kilburn Home for Governesses, 39, Victoria-road, Edgware-road, N.W. (15s. 6d. a week); the Governesses Home, 47, Harley-street (15s. a week); Governesses Home and Registry, 19, Bloomsbury, Oxford-road, Manchester (14s. to 18s. a week); Governesses Institute, Blackbourne-terrace, Liverpool (15s. a week); Home for Gover-

nesses, 7, Rutland-square, Edinburgh (12s. to 15s. a week); Governesses Home, 6, Lower Fitzwilliam-street, Dublin (16s. to 18s. a week).

HAIRDRESSING.

Messrs. Truefitt and Douglas, both of Bond-street, take apprentices for dressing ladies' hair. It takes a girl of moderate ability nine months to prepare herself to take her turn in the saloon. Mr. Truefitt trains a great many ladies, and the intelligence they bring to bear upon the profession and their manner are much appreciated by his customers. Their average earnings are from 32s. to 35s. weekly, and the hours of work are from 9.30 a.m. to 6.30 p.m.

HANGERS UP (see Printers).

HIGH SCHOOL TEACHERS.

Miss Buss, who is one of the leading lady teachers of Great Britain, and whose voice has great weight in the councils of masters and mistresses, has done much towards the improvement of the position of lady teachers in this country. Her list of the salaries of ladies now engaged in educational work is an instructive one, and will be read with interest by all meditating the profession of teaching. All ladies who intend attempting High School education as a way to earn a living should communicate with Miss Buss, at the North London Collegiate School, London, N.W. She will forward all particulars respecting the proper course of learning necessary. The following are some of the actual salaries made by ladies:—

Name of School.	Head Mistress's Emoluments.			
	Fixed Salary.	Capitation Fee.	Minimum.	Maximum.
	£		£	£
Ambleside, Westmoreland...	75	£1 to £3	135	255
Bedford Town School.....	100	10s. to £3	200	700
Bow	75	15s.	225	...
Bradford, Yorks	120	...	...	...
Bristol, Colston's School.....	50	15s. to £1 10s.	200	350

Name of School.	Head Mistress's Emoluments.			
	Fixed Salary.	Capitation Fee.	Minimum.	Maximum.
	£		£	£
Brentwood, Essex	50	£1 to £2	150	250
Burton-on-Trent	50	15s.	163	...
Camden School, London ...	75	15s. to £1	375	475
Clerkenwell (Brewers' Company), London	100	£1	400	...
Dolgelly, Wales	70	10s. to £1 10s.	110	190
Exeter, Maynard's Girls' School	100	£3 to £6	400	700
Great Crosby, Lancaster. ...	120	£2 to £4	320	520
Greycoat, Westminster	80	10s. to £1 10s.	230	530
Hatcham, Surrey.....	100	£1 to £2	300	500
Hoxton	75	10s. to £1 10s.	225	525
Loughborough, Burton Upper School.....	100	£1 10s. to £3	250	400
North London Collegiate School	100	£2 to £3	900	1,300
Roan Schools, Greenwich ...	100	£1 to £2	400	700
Stamford, Browne's Middle School	100	£2 to £4	300	500
St. Clement Dane's, London	100	£1 to £3	250	550
St. Giles's, Cripplegate ,,	100	10s. to £1 10s.	225	475
St. Martin-in-the-Fields ,,	80	10s. to £1 10s.	155	305
St. Paul's, London	200	£3 to £6	1,100	2,000
Thetford.....	75	£1 to £3	115	195
Wakefield, Yorkshire	100	£1 10s. to £3	250	400
West Ham, Essex	60	£1 to £2	260	460
Westminster	100	£1 to £2	220	340
Wyggeston, Leicester.....	100	£1 to £3	300	700

HOSPITAL NURSING.

Numbers of women are attracted to this occupation, and after giving it a trial find that they are unable to proceed with it. We advise ladies entering upon this vocation to give the matter mature and serious consideration. The work is arduous, the pay is not good. At most of the London hospitals training in this work can be had. A personal application to the Secretary is usual. Ladies should be over 25 and under 35 years of age. Probationers are always admitted in the first instance from one to three

months on trial. At the end of this period, if a candidate is found unsuitable, she is at liberty to leave ; but if found suitable, she is generally required to sign an agreement to remain in the service of the hospital for three years. The training includes medical, surgical, and obstetrics, and night work. In most hospitals the breakfast is at 6.30, and work in the ward commences at 7. Probationers are expected to perform menial duties of all kinds. The hours are extremely long and the holidays are short. At some hospitals no pay is given for the first year, at others it commences at from £8 to £15 per annum for the first year, and from £12 to £24 for the second, third, and fourth. This remuneration includes, however, board, lodging, clothing, washing, and other extras. No strict rule can be laid down as to the amount of holiday allowed. At some hospitals as much as a month is given, but others allow a fortnight or three weeks only. The rules of a representative London hospital may be taken as an average of those of leading hospitals in Great Britain, they are as follow :—The committee of the Nightingale fund have made arrangements for the admission to their school at St. Thomas's for the reception of a limited number of gentlewomen who may wish to qualify themselves in the practice of hospital nursing, with the express object of entering upon this profession permanently, and eventually filling permanent situations in public hospitals and infirmaries. These probationers are required to pay towards the cost of maintenance the sum of £30, and to give an undertaking to continue in the work for three years after leaving the school ; but upon payment of a higher sum of £52 to cover the cost of maintenance and also partly of instruction, &c., the undertaking will be limited to one year after leaving the school. Occasional vacancies occur for the admission of gentlewomen free of expense, together with, in some cases, a small salary during the period of training ; these advantages are strictly limited to those whose circumstances require such aid. Candidates desirous of receiving this course of training should apply to Mrs. Wardroper, the matron at St. Thomas's Hospital, subject to whose selection they will be received into the hospital as probationers. The age considered desirable for these probationers is from 25 to 36, single, or widows without encumbrance. Should opportunities occur for affording instruction in some of the duties of supervision, they will be expected to remain for that purpose for a further

period of two or three months, but in that case no further payment will be required. Payment is required by two equal instalments in advance, viz., half on admittance, and half at the end of six months. No part of the instalment will be returned in the event of the probationer leaving from any cause. The probationers receive instruction from the medical instructor of the hospital and the hospital "sisters," and they serve as assistant nurses in the wards of the hospital. The names of the probationers are entered in a register, in which a record is kept of their qualifications. At the end of the year those whom the Committee find to have passed satisfactorily through the course of instruction and training are entered in the register as certified nurses. On completion of their training they must be prepared to take employment on the nursing staff of some public hospital or infirmary wherever offered them by the Committee, and to continue in similar employment for a period of three years at least, this period being limited to one year in the case only of those who have paid at the higher rate. As a step to superior situations, they will be expected, if required, to accept an engagement as nurse (day or night) at the usual salary, for the whole or a portion of the first year after leaving the training school. Engagements, whether as nurses or in a superior situation, will from time to time, during the above period, be made through the committee with the managers of the institution by whom the certified probationer is to be employed. Her salary will be paid her by such managers, but it is expected that she will not terminate any engagement without due notice to the Committee. Withdrawal from the service may be allowed upon special grounds—family circumstances, or otherwise—to be approved by the Committee. Probationers are not expected to go out of Great Britain, unless they especially desire to do so. The applications are numerous for trained nurses to fill superior situations, such as matron, superintendent, assistants to those officers, and ward sister or chief nurse; but generally there is a want of qualified candidates. Suitable appointments are offered to certified probationers, and the inclination of the probationer is in each case consulted as far as circumstances permit. A strong constitution is an absolute necessity. No woman who has not undertaken the work can have any conception of the drudgery and fatigue with which the hospital nurse is obliged to be content. Just

now there is a sentimental desire to swell the ranks of these good women among many young ladies who would shrink from a tithe of the painful work were they to meet with it in their own houses. So many draw back that we would again remind our readers that most serious consideration of the many objections to the life must be considered before any preliminary steps are taken.

HOUSE-AGENTS AND SURVEYORS.

One of the most extraordinary phenomena of employments is the enormous growth of the somewhat mixed class known as house-agents. Many house-agents rise and fall each year, and the reason for the rapid changes in this business is the fact that to a certain extent the house-agent owes his position to the neighbourhood in which he resides. A new neighbourhood arises nowadays with such remarkable swiftness. In many portions of the provinces there is still a good opportunity for men of energy and business habits. The capital required is small, and after a pupilship or apprenticeship with a London house, a young man with some connection in the country can do well. A number of leading house-agents are now trying to improve the position of their body by forming an organisation. This is, however, at present in embryo. The Surveyors' Institution, 12, Great George-street, Westminster, S.W., though mainly supported by surveyors, has a large number of house-agents in its ranks. At the present time not one house-agent in ten has passed the examination of the Institution. A prominent business man, however, assures us that compulsory membership in the Institution is only a matter of time. The majority of house-agents have become what they are by entering the office of one of their profession as a clerk, and when they have learned the business and saved enough capital launched out on their own behalf. The work of rent collecting, of acting as agent between buyers, sellers, and tenants of houses, and of property, requires more business ability than at first sight seem necessary. Tact is, perhaps, the chief qualification. The Surveyors' Institute, according to its own statement, was established to secure the advancement and facilitate the acquisition of that knowledge which constitutes the profession of surveying—namely, the art of determining the value of all descriptions of landed and house property, and of the various

interests therein, the practice of managing and developing estates, and the science of admeasuring and delineating the physical features of the earth, and of measuring and estimating artisans' work. It is not at all necessary for any man who wishes to become a house-agent or surveyor to join this Society, but all who are able to do so should at least become Professional Associates. The scholarships and prizes given by the Society are numerous, and enable the student to pay the fees. There are three examinations altogether for the degree of Professional Associate. These are the preliminary examinations for candidates desirous of qualifying, which are held in January of each year at the Institution in London, and for which applications must be received in the previous November. The students must be over 18 years of age and must be either past or present pupils of surveyors, or must have been studying with a view to enter the profession. A certificate to the effect that the candidate has passed the matriculation examinations of Oxford, Cambridge, London, or of any other University in the United Kingdom, or that he has passed with honours the Senior Local Examination of the University of Oxford, or Cambridge School Examination Board, will exempt him from this examination. The preliminary subjects are: The elements of Algebra, including simple equations, Euclid, English history, composition, and writing from dictation; and some acquaintance with one of the three languages, French, Latin, or German, is also required. The fee for this examination is one guinea. The maximum number of marks is 500. The student who obtains the highest marks receives the entrance fee back again. The second examination is "The Students' Efficiency Examination," which is thus divided into subdivisions. In subdivision 1 the subjects are land surveying and levelling and the elements of trigonometry. Candidates must also prepare plans from actual surveys, and forward them to the Secretary, not less than a fortnight before the examination. A paper of instructions can be obtained from the Institution. (2) Book-keeping; (3) law of landlord and tenant; (4) agriculture; (5) construction of farm buildings; (6) forestry; (7) drainage; (8) geology and composition of soils. In Subdivision 2 the first two subjects are the same as those in Subdivision 1. Subdivision 4 is the enfranchisement copyhold, 5 the law of fixtures, 6 the law of dilapidations, 7 the agricultural law, 8 law of easements and riparian rights. The scholarships and

prizes are: The Institution Prize to the student who obtains the greatest number of marks over 500 in the proficiency examination; an Occasional Prize of five guineas, called the *vivâ voce* prize, given to any student who passes a vocal examination in some appropriate subject, and who is under 21½ years of age; the Crawter Prize; and the Driver Prize of £15 15s. for conspicuous merit. There is an Institution Scholarship awarded to the student who obtains the greatest number of marks over 900 in the subdivisions, and his name is painted on the walls of the Lecture Hall; £10 10s. to the student not being a winner of the Institution Scholarship who obtains the greatest number of marks over 500 in the subdivisions. Roughly speaking, then, these are the subjects for the examination of the P.A. degree of the Surveyors' Institution.

HOUSE DECORATION.

The decoration of houses has received a great impetus from the art craze of the last few years. Several schools have been established for instruction in this work, and numbers of ladies are earning considerable amounts by the exercise of their skill and originality. Ladies are now able to design wall papers, friezes, carpets, windows, ceilings, and numbers of them earn a living by directing less artistic sisters in the art of house furnishing. There are several firms in business at the present time which have been started by ladies, and some of these receive pupils. Miss Collinridge, 9, Beaumont-street, Portland-place, receives pupils for a moderate fee; Miss Garret, of 2, Gower-street, W.C., the well-know lady house decorator, upholsterer, and furniture maker, receives a few pupils at a premium of £300. A number of other firms in London are also engaged in instructing ladies how to decorate.

HOUSEHOLD SERVANTS.

Domestic service is a branch of occupation that is every year more and more being recruited from the educated classes. "Lady helps," whose advertisements are now so common a feature of our newspapers, are only servants under a politer designation. Slowly and surely the performance of manual labour by women is getting to be regarded as an honourable and not derogatory means of existence. And it

stands to reason that with the rapid increase in the female population of this country, numbers of women must either starve or use their hands. Domestic service is at least as comfortable a means of existence as that endured by the ordinary governess. The domestic servant, in this country at any rate, is independent. She can either stay or go, as she likes, and she knows that, if she accepts the latter alternative, there are numbers of mistresses only too anxious to receive her into their households. She is well fed, receives pay which enables her to dress respectably, and the chief objection to her vocation is the fact that, as a rule, she receives but little holiday. The most universal description of servant in England is the "general servant." The "general servant," more commonly known as a "general," commences her working life at from 16 upwards. She probably enters the establishment of a small tradesman or householder, her duties are multifarious, her work much, and her hours of idleness few. If she is an intelligent girl, she progresses until perhaps one day she occupies the position of housemaid or cook, in an establishment of importance; and who can say but that one day she will occupy the proud position of housekeeper! The work performed by "general" servants cannot be described, inasmuch as it includes, usually, the whole work of a house. Her wages are, in England, from £8 per annum to £20, in Scotland and Ireland a little less. Housemaids in small establishments, usually perform work not very different to that of the general servant. In large households, four and six housemaids are kept. Their work consists in cleaning staircases, corridors, and bedrooms. Housemaids receive from £12 to £26 per year. In establishments of unusual size, there is usually a head housemaid, who would probably receive the latter remuneration. Parlour-maids are employed in work not much dissimilar to that of the housemaid. A parlour-maid has the drawing-room in her care, she arranges the dinner table, answers the front door, escorts visitors to the drawing-room, is responsible for the mending of the table linen, and has many of the politer household duties to perform. A writer on the subject says: "a parlour-maid's duties might with advantage be undertaken by a lady, who has not received many educational advantages. The contiguity of the other servants may be urged as an objection; but two or three friends might seek for situations in the same

house, such as cook, housemaid, and parlour-maid, and no mistress would object to such an arrangement. We know of a house in the country, where the four women-servants are ladies, and the plan answers admirably." Dairy-maids receive from £16 to £20 a year. Many large estates are now devoting attention to the cultivation of dairy produce, and the number of dairy-maids is naturally increasing. The Cheshire Dairy Farm is instructing those desiring to learn dairy work. Nurses hold a particularly responsible position. Their wages are from £15 to £25 a year. In the ordinary establishments, where only one is kept, they are expected to assist in the general house work. They should be able to sew, and be patient and careful in the management of children. Nursery governesses, who are in reality superior nurses, only receive from £18 to £30 per annum, In large households, where several nurses are kept, the head nurse will receive frequently as much as £50 and £60 per annum. Ladies'-maids hold a much-coveted position in households. They are well paid, have many perquisites, and are usually particularly well treated. The semi-confidential nature of the position makes it one much prized by womankind. The Scientific Dress-cutting Association state that they can frequently find places for their pupils. The qualifications are dressmaking, hair-dressing, good education, and some acquaintance with foreign languages. The wages are from £25 to £45 per annum. Ordinary plain cooks receive from £16 to £45 a year. They must be qualified to prepare food of households of moderate and medium means. In large establishments, the cook is frequently assisted by first, second, and third kitchen-maids. This is often an excellent opportunity for a young woman to obtain a knowledge of cookery. The pay of the kitchen-maid is from £15 to £25 a year. The duties of the scullery-maid are usually to assist the kitchen-maid. She does all the washing up, and the rougher work of the kitchen. Laundry-maids are kept in large establishments. A complete knowledge of washing and getting up of linen are necessary. The wages are £25 to £30 per annum. Stillroom-maids, whose work is to look after the china and plate, make coffee, tea, and assist the housekeeper, receive from £25 to £30 per annum. In very large establishments where a number of men-servants are employed, the whole house is under the management of the head steward. He

is usually a well-paid official. In addition to a salary of from £90 to £150 per annum, he makes a considerable sum by way of tips and other perquisites. The stewards are generally selected from smart young footmen, and other under servants. Under the steward in the houses of noblemen, and other wealthy persons, is the groom of the chambers. He is chiefly responsible for the comfort, care, and attendance of and upon visitors. He announces guests on the occasion of entertainments. He does not wear livery, but is usually attired in scrupulous black. Indeed, he is often mistaken for one of the guests themselves. The salary is from £70 to £100. The butler, who, in smaller houses, rules the establishment, is an important man. He receives from £60 to £80 a year, but during the past few years, the remuneration of this class of man-servant has considerably declined. Under-butlers have almost entirely died out, their work being done by stillroom-maids. Footmen receive from £20 to £30 a year; coachmen, who look after the stables, receive £30 or £40 a year and rooms. Where two coachmen are kept, the second coachman will receive £25 a year. Grooms look after saddle horses; their wages are £20 a year or more. Housekeepers are well paid. In large establishments they receive as much as £70 to £100 a year. In addition they often get handsome tips.

INDEXERS.

Publishers give a good deal of work to ladies patient enough to compile indexes. System, exactness, and punctuality are necessary. No definite scale of payment can be stated. Applications should be made to the leading publishers in London, who will place the applicant's name on their books. In addition to indexing, there is a good deal of arranging of literary matter for compilation that publishers are willing to give out to ladies.

INDIAN CIVIL SERVICE, THE.

Preparation for the Civil Service of India must be commenced very early in life. Most lads are trained for it from nine or ten upwards. It has been said that the Civil Service of India offers an opportunity for a bright boy to make a more rapid rise in the social scale than he could attain by any other means. The three primary qualifications are

these: (1) The candidate must be a natural-born subject of Her Majesty; (2) He must be over seventeen and under nineteen on the 1st of January in the year of his examination; (3) He must have no disease, constitutional affection, or bodily infirmity unfitting him or likely to unfit him for the Civil Service of India. He must, of course, be of good moral character. The subjects of examination are English composition (300), English history (300), English literature (300), Greek (600), Latin (800), French (500), German (500), Italian (400), mathematics, pure and mixed (1,000), natural science, that is, the elements of any two of the following sciences, viz., chemistry (500), electricity and magnetism (500), experimental laws of heat and light (500), mechanical philosophy, with outlines of astronomy (300), logic, elements of political economy (300), Sanscrit (500), and Arabic (500). A candidate may take up six of these subjects and pass. The selected candidates are invariably those who attain the highest number of marks. And the anti-smattering process of deducting marks from the papers of those who have been apparently crammed is put into force vigorously. On passing this examination, the candidate becomes what is known as a probationer. During this period, he remains in England at the expense of the Government. He may, if he chooses, proceed to either Oxford, Cambridge, Dublin, Edinburgh, Glasgow, Aberdeen, St. Andrews, University College (London), or Durham. He receives £300, and with this money can pass two years at quiet colleges at either Oxford or Cambridge. Periodical examinations occur in law (1,250), Arabic (400), Persian (400), vernacular languages of India (400), classical languages of India (500), history and geography of India (350), political economy (350). Extra marks may be earned in the final examination to the extent of 350 by candidates taking up botany, agricultural chemistry, geology, or zoology. Students who wish to take a degree at the University are frequently allowed to do so by the Secretary of State for India, who makes an additional grant of £150. Successful candidates get free first class passage out, and receive on arrival a nominal salary of £500 a year. Owing to reduction in the value of the rupee this is really only £350. The holidays given are on a liberal scale —one year out of every four is allowed. On the completion of twenty-one years' service, the civil servant retires on an income of £1,000 a year. In the majority of cases it would

be of no use entering for this enormously difficult examination unless one has been educated for it from a very early age. At fifteen a lad would go to a "coach," whose hints and suggestions would go far towards helping him through. THE INDIAN FOREST SERVICE requires more natural physical qualifications than the Indian Civil. An applicant for admission must be (1) A natural-born British subject; (2) Above seventeen and under nineteen on the 1st of June of the year of his examination; (3) He must be unmarried; (4) Must be the possessor of a strong constitution, perfect vision, sound hearing, and must produce certificates of good conduct for two years and a list of places at which he has been educated since he was nine years old. The subjects of the examination are: Orthography (maximum 300—minimum 150), handwriting (200—100), intelligence (100), arithmetic in all its branches (300—100), geometry, including first to fourth and sixth Books of Euclid (300—100), Algebra, up to and including binomial theorem, arithmetical and geometrical series, interest and annuities (300—100), logarithms, including use of tables (100—33), plane trigonometry, up to and including the solution of plane triangles and calculation of heights and distances (300—100), mensuration (100—33), elements of mechanics (300—75), elements of physics, omitting electricity and magnetism (300—75), inorganic chemistry (400—133), mechanical drawing of geometrical figures, limited to the drawing of plane figures (400—80), elements of botany (400—100), French or German (400—100). All the above subjects are absolutely compulsory, so that, should the candidate fail to attain one mark less than the minimum, he fails. Extra marks can be obtained by translation of French or German, by freehand drawing, by the elements of geology and mineralogy. A course of training is received by those who succeed in attaining the minimum; no candidate yet succeeded in getting the maximum marks. The first twenty-two months of the preparatory stage are spent at Cooper's Hill College, at the expense of the Secretary of State for India in Council. An annual charge of £180 per annum, payable in advance, is necessary. Life at Cooper's Hill is in most cases similar to that at the Universities of Oxford or Cambridge. The students are most of them from the best class of young Britons, and they manage to combine work and leisure in equal proportion. Periodical examinations are held during

this training, and a final examination of a severe nature concludes the course. In the vacations, short tours on the Continent are made, riding practice is taken, and prior to leaving for the East, some time must be spent in an English or foreign forest at the Government expense. The Secretary of State for India pays the expenses of the passage out, and the pay, £25 per month, commences on the day of arrival.

INLAND REVENUE (Assistant Surveyors of Taxes).

Under the revised regulations for the Civil Service, successful candidates at the open competition are now allowed to decline service in any office which they consider unsuitable. So many candidates have availed themselves of this permission in declining to accept the post of surveyor of taxes, that the Civil Service Commissioners have had to resort to other means of filling up the vacancies. They are now reserved for deserving Excise officers, so as to attract to the Inland Revenue Service candidates of position and education. The higher Excise examination subjects are :—Translation from and into French, German, or Latin ; the first three Books of Euclid, Algebra, book-keeping, political economy (so far as relates to rates and taxes). The fee is £5. the tax surveying branch of the Excise comprises 254 surveyors and assistant surveyors. The whole body are established on the scale of pay applicable to the upper division of the Civil Service under the Playfair scheme, commencing at £100 per annum, and rising to £400, by triennial increments of £37 10s. In addition to this service scale, there is a sum of £5,700, allowed for duty pay, in the more important districts, which is allotted in sums not exceeding in any one case £200 per annum. Surveyors are stationed in London, Edinburgh, Dublin, and in various other leading towns in the United Kingdom. They are liable to be removed from one station to another, according to the requirements of the service. When the surveyors have attained the maximum of their class, they are eligible for promotion to Inspectorships. There are 14 inspectors, at £550, rising to £650 by £20 annually, and four superintending inspectors, rising to £800 by £25 annually. ASSISTANTS OF EXCISE, to whom these positions are open, must enter the service between the ages of 19 and 22, and be single men. The open competitive examinations are held biennially about May and November simultaneously, in London, Edinburgh, Dublin, Liverpool,

Bristol, Plymouth, Leeds, Birmingham, Norwich, Dundee, Aberdeen, Cork, Galway, Belfast, Londonderry, and Limerick. The fee is £1 ; subjects :—handwriting, orthography, arithmetic, English composition. Optional Subjects are :—Higher arithmetic and geography, especially that of the British Isles. The salary commences at £60 per annum, in addition to 2s. per diem when actively employed in divisions. Excise officers may hope to reach by merit any of the higher positions. Promotion can be earned by all who make up their minds to strive. From second-class assistant there is a rise to first-class assistant, and then a salary of nearly £100 per annum is started with. There is another rise to ride officers, and so on. The collectors in this branch receive from £500 to £800 per annum. The LABORATORY at Somerset House is giving employment to a number of temporary and permanent assistants. The students are selected from competitors who must have been in the ranks of the assistants just mentioned, for at least a year. Those who have a taste for chemistry, electricity, and kindred sciences, could not have a better field for their talent. Here are the subjects required :—Algebra, up to quadratic equations, including first two Books of Euclid, physics, hydrostatics, magnetism, electricity, chemistry (organic and inorganic), inorganic within the limits of the advanced stage of the Science and Art Department examinations, and the elementary stage in organic. This examination takes place every year in July.

INSPECTORS OF MINES.

Candidates must be nominated by the Home Secretary, and be between the ages of 23 and 35. To be qualified for a nomination, a man must, within five years previous to his application, have been employed for two years underground in a mine. The examination subjects are :—Handwriting, orthography, arithmetic as far as fractions, English composition, theoretical and practical acquaintance with coal-mines and minery. A knowledge of metalliferous mines is optional. The examination fee is £6, and the salary commences at £300 ; £1,000 is the maximum. Factory Inspectors are subject to the same conditions. The examination is more extended, embracing political economy, mathematics, ancient and modern languages. The salary is the same, but the limit of age is between 21 and 30.

INSTRUCTION BY CORRESPONDENCE.

Instruction by correspondence was first established in 1871 as a means of assisting ladies living in the country who may wish to prepare themselves for the Cambridge University examinations open to women. The method is :—(1) Papers of questions set from time to time, and the answers looked over and returned, with comments. (2) Solutions of difficulties and general directions as to books. (3) Short essays, or *résumés* written by the pupils, and sent for correction to the teachers ; or, in the language classes, passages set for translation. The papers are, if possible, returned to the students not later than a week from their reception, and another set of questions sent at the same time. The classes are conducted by ladies, who are authorised to receive as pupils those whom the Cambridge lecturers are unable to accept. There is an entrance fee of 5s., and the fee for the course of lectures is four guineas. Candidates usually enter in October and continue till May, when the session closes. Those who wish to join the classes at Newnham should address, Mrs. Peile Trumpington, Cambridge. Miss Shore, Orchardpoyle, Taplow, has organised some correspondence classes. She is assisted by some ladies who are qualified for the work. She charges three guineas per subject. We can also recommend the St. George's Hall, Edinburgh, Correspondence and Oral classes. They prepare candidates for St. Andrews and Edinburgh Universities. They also give help in home studies. Miss M. R. Walker, St. George's Hall, Edinburgh, will forward particulars on application. There are other classes of this kind at Glasgow—Miss MacArthur, 4, Buckingham-street, Hillhead. There are some well-known classes at Oxford—Mrs. Ewing, 17, St. Giles.

INSURANCE OFFICES.

An insurance office is a good field for a smart youth. As in a bank, the influence of a director is necessary for those who wish to get in ; but, once in, the clerk depends upon his own ability alone for his promotion. The work is of a most intricate nature. A young man who wishes to get on must give up a portion of his leisure to work. (See Actuaries.) Junior clerks in insurance offices receive from £50 to £100 per annum. Managers receive as much as £400 to £600 per annum.

INTERPRETERSHIPS.

Interpreters in the Civil Service enjoy a fairly easy life. The examinations are severe ; but, once passed, the candidate has not much hard work. Candidates for student interpreterships in Siam, China, and Japan, should be not under 18 and not over 24 at the date of the examination. They must be natural-born subjects of Her Majesty, except when the Secretary of State gives special permission for aliens. The subjects are :—Arithmetic (200), handwriting (200). intelligence (100), orthography (200), English composition (200), Euclid (200), précis writing (200), geography (200), Latin (400), French (300), German (300), criminal law (250), mercantile law (250). Handwriting, orthography, and arithmetic, up to and including decimal fractions (and vulgars), are compulsory. The others are taken up in order to gain more marks. A student interpreter, after passing the examination, goes to whichever country the Government selects for him. He receives £200 per annum. Promotion is rapid to those up to the work, and in many branches of the Consular Service they are well paid, and of distinction. Good physical strength is required to stand the Eastern climate. They must live a temperate and quiet life. The student interpreterships for Turkey, Persia, and the Levant offer the same salary (£200 per annum) as those for the East. The obligatory subjects are : Handwriting, orthography, and reading aloud, arithmetic, including vulgar and decimal fractions, composition, translation from and into French, writing from dictation, writing a letter in French on an ordinary subject, and conversation, paying particular attention to accents, genders, and tenses. The optional subjects are : Ancient Greek, Italian, German, and Spanish. As to the promotion of these student interpreters, the Civil Service Regulations tell us that, on leaving the educational establishment at Constantinople, students will be named assistants, and detached for service under the Embassy at Constantinople, the Legations at Teheran, Athens, or Morocco, or in one of Her Majesty's Consulates in the East. The assistants will receive a salary of £300 per annum. They will be called upon, before advancing further in the service, to pass an examination in the Civil, Commercial, and Criminal Law of Turkey, and in International Law, in the history, language, and mode of administration of the

country in which they have resided, and they will have to show a general knowledge of the history of the Turkish Empire, and of the treaties which have been concluded between it and foreign powers.

IRON-MILL WORKERS.

With one exception, this is, numerically, the most powerful trade in the United Kingdom. It includes puddlers (17s. 9d. to 37s.), rollers (75s.), shinglers (50s. to 52s.), heaters (33s. to 55s.), roughers (58s.), catchers (45s.), bogey men (24s. to 27s.), pilers (24s.), straighteners (20s. to 39s.), sawyers (24s.). In plate mills the wages are somewhat different :— Heaters (43s.), rollers (63s.), shearers (73s.), pilers (42s.), pattern-makers (30s. to 36s.), fitters (26s. to 36s.), smiths (29s. to 36s.), strikers (25s.), platers (39s), riveters (35s.), moulders (24s. to 36s.). Application must be made at one of the mills for work.

JEWELLERY MAKING.

This is not really an unhealthy trade. The surroundings are certainly usually unhealthy, but the trade itself is not at all so. The fact of so much soldering being done requires a large amount of gas, and this, of course, renders the atmosphere close and oppressive. The centres of the trade are Birmingham and Clerkenwell. In Birmingham apprentices, who usually commence at 14 or 15 years of age, earn from 3s. 6d. to 4s. per week, rising to 10s. or 12s., when between 20 and 21 years of age. A clever and industrious youth will frequently double this by "overwork," which it pays his employer to give him. When out of his time, the general artisan must be a very indifferent workman if he cannot earn 30s. per week ; the majority, especially in the higher departments of the trade, in which skilled hand-work and taste are required, earn from £2 10s. to £3 weekly. Enamellers are a highly paid class, and earn from £3 to £5 per week. A considerable number of young people are employed on gold ornaments, such as earrings or lockets, in blank stamping in a screw-press. This stamping is difficult work, much practice is required before perfection is attained, and six out of ten lose one or more fingers in the educational process. It is satisfactory to know that the work engenders

artistic sentiment and refinement. Jewellery workers are usually well educated, and many of them now receive instruction in artistic work. It has this advantage over many occupations: it is an industry that cannot possibly die out. Young men in the neighbourhood of Birmingham and Clerkenwell should, in preference to aspirations to a black coat and high stool, consider the question whether or not they should enter upon this solid employment.

KINDERGARTEN TEACHERS.

The Kindergarten is now one of the features of our education. It has opened up work for women of a most interesting and useful nature, and it may be safely said that it is only in its infancy as yet. It is unfortunate that the true Froebel method has been so seriously injured by the rival, or rather imitation systems, which have sprung up all over the country. There are now ten training colleges established for Kindergarten teachers, and instruction can be had also in connection with numbers of other schools. A good school is that known as the Kindergarten College and Practising School, 21, Stockwell-road, S.W., the fees for the two years' course are altogether £21. Application should be made to the Secretary. Miss Emily Lord, 9, Norland-place, Notting-hill, also gives instruction, as do Mrs. Holton, Gloucester-road, South Kensington, and Miss Franks, Home College, York House, Baker-street. The Froebel Society schools are not expensive. Altogether the fees amount to about £40, for which sum an intelligent young woman can be educated in a profession that will be a certain means of bread-winning. The preliminary examination is the Oxford or Cambridge, Senior Local, or the College of Preceptors' senior. The limits of age are over 18, and candidates must have had at least six months' experience in the education of young children. At the end of the first year students must pass part of the examination indicated by the Council, and during the second year the mornings are occupied in gaining practical experience in teaching, while the afternoons are still devoted to theoretical studies. The hours are from half-past nine to half-past four o'clock, with a half-holiday on Saturdays. Certificates are granted at the end of the second year, and it is not long before a Kindergarten teacher finds employment, the demand for teachers being considerably in excess

of the supply. The salaries begin at £60 a year, and rise sometimes to £100, the average, however, being £80. Candidates for admission to one of the training colleges, must send their names to Miss Bayley, 17, Buckingham-street, Strand. Students are non-resident, but the Council will recommend homes in the neighbourhood of the colleges. There are five training colleges in London, and others at Birmingham, Manchester, and Saffron Walden.

LADY VISITORS.

A fund has been started in London for the employment of ladies of small means as district visitors. The work is hard, and the visitors require to live in the parish. A certificate as to character signed by a clergyman is required. Salaries vary from £30 to £50 a year. Miss Jackson, 26, Grosvernor-road, S.W. will furnish particulars.

LAUNDRY WORK.

The elevation of the laundry is an accomplished fact. The steam laundry system has revolutionised the work. It cannot be recommended, except to strong young women who are able to work 10 or 12 hours a day. Lady superintendents of laundries, receive from £70 to £100 per annum, and one manager of a well-known Metropolitan branch is paid £250 per annum. Lady clerks are becoming general in steam laundries. They receive from £40 to £80 per annum. Applications should be addressed to the Secretaries or Managers of Steam Laundries.

LAW COPYISTS.

Law copying is an occupation that will very probably be almost superseded by type-writing. In the United States the type-writer monopolises all the work that was formerly given out to professional law copyists. See Type-Writing.

LAW, THE.

In order to become a SOLICITOR it is necessary to pass three examinations—the first, or the preliminary, as it is called, is undertaken on entering upon the "articles;" the second in the middle of the period of apprenticeship; the third or final at its expiration. The preliminary is not a difficult one, it is about equal to the Oxford Senior Local or the College

of Preceptors' Senior, it is particularly strong in Latin ; the other two examinations are restricted to law entirely. The expenses are as follow :—Stamp duty on articles of clerkship, £80 ; fee on admission to Rolls of Court, £30. In general there is also a premium to the solicitor to whom the student is articled. This may vary, according to his professional status, from £100 to £500 for the term of three or five years ; the average being £200 or £300. All solicitors and articled clerks are under the control of the Incorporated Law Society (Chancery-lane), a body which exercises a supervision over professional matters scarcely represented in any other profession. During articles, and indeed at any period, the student will derive great advantage from joining one of the numerous legal debating societies, some of which have been established for a very long period ; and also from attending the courses of lectures provided by the Incorporated Law Society on the various branches of conveyancing, equity, and common law. These, in fact, have come to be recognised almost as a part of the requisite training. Summing up, therefore, the cost of becoming a solicitor, inclusive of all the above necessaries and advantages, may be stated at about £350 to £400 for the whole course (exclusive of living). After the final examination, the enrolment as a solicitor takes place at the court before a judge. On this occasion three documents have to be produced—the original articles of clerkship, the affidavit of service as clerk, and the certificates of having passed the final examination. The stamp fee of £30 has to be paid, and the form is then signed by the Master of the Rolls. This constitutes the solicitor's authority to practice. On entering upon a practice, some further fees are payable to maintain this. If the practice be within ten miles of the General Post Office, London, the fee is £4 10s. per annum for the first three years, and £9 subsequently. If outside that limit, it is £3 for the first three years, and £6 subsequently. The solicitor has, of course, to learn many points in regard to the practice of his profession which come within the code of "etiquette" rather than of law, but are, nevertheless, essential to success. With these it is unnecessary to deal in detail here. The training of the BARRISTER, in respect of his knowledge and study of law, is the same as that of the solicitor, but in regard to his practice, it amounts to a distinct profession ; and for that reason a solicitor who determines

on reading for the Bar has almost to begin life afresh, so far as the course of special training goes. The barrister's position is, in many respects, a most responsible one, and his law must be reliable and accurate if he wishes to avoid being taken to task by the solicitors who constitute his source of business. The Bar furnishes the Bench and Judges, and with this gaol before him, the pleader soon becomes alive to the consequences of a false step. If training for the Bar has been commenced early enough, the student undoubtedly gains much by some acquaintance with a solicitor's practice; but if he undertakes it after himself carrying on such a practice, it involves not only the same course of reading and examination, but the payment of all the same fees, notwithstanding his previous training as a solicitor. The first step to the Bar is to enter the name at one of the four Inns of Court—viz., the Inner Temple, Middle Temple, Lincoln's Inn, or Gray's Inn. In these four bodies alone lies the power to call to the Bar. A preliminary examination has to be passed; and subsequently two others, in Roman law and English law respectively. The total fees for these amount to £140 6s. 3d. A course of reading in a barrister's chambers for at least twelve months is also requisite. The usual fee for this is one hundred guineas, for Equity or Chancery practice; otherwise the course is sometimes shortened to six months, at a fee of fifty guineas. A student thus reading is not said to be "articled," as he is practically free, and under no control excepting that of the benchers. There is no prescribed time at which he is called to the Bar after being entered as above; but before being called, he must keep a certain number of terms (usually twelve) by dining in the hall of his Inn three or six nights in each term, according to circumstances. There are four terms in a year, and, as a rule, the complete course occupies three years or thereabouts. Bar students and solicitors are on a totally different footing in every way. If a practising solicitor determines to enter as a Bar student he can do so (with five years' training), by resigning practice as a solicitor, and getting struck off the rolls by affidavit and petition; in this case a guinea is paid on application as well as the full fees already mentioned. Circumstances rarely lead to a barrister becoming a solicitor, although experience in both branches (where the change offers exceptionally brilliant prospects) is worth consideration.

Barristers are said to be "at" or "within" the Bar. An "outer" barrister pleads beyond the Bar. This class includes all who are Queen's Counsel. The dates and places of the examinations can be obtained on application to the Clerk of the Counsel on Legal Education, Lincoln's Inn, London. There are seven examinations yearly, and two days' notice must be given before entry. The respective Inns offer several valuable scholarships, mostly of the value of £50 or £100 per annum; a large number of prizes are also given. The "call" to the Bar cannot be obtained under twenty-one years of age, and not, of course, until the examinations have been passed, the necessary terms kept, and all fees paid. The fees on call amount to about £100. The highest position attainable in this branch of the profession is that of the Attorney-General, who is at the head of the Bar. He acts for the Crown, and is also free to undertake private business. The Solicitor-General is also a barrister—not a solicitor—and performs the duties of the Attorney-General in his absence, succeeding to his position on his retirement or death. Among the minor branches of the legal profession that of notary, or notary-public is one of importance. The notary occupies a position in some way intermediate between the solicitor and the public. He is, however, himself a solicitor, and has gone through the regular course: his speciality being in matters of record, such as the attesting of deeds. Practice as a general solicitor may be carried on concurrently with that of a notary; but no solicitor can qualify as a notary without having been articled for five years in a notary's office. The work of a notary is paid by fees according to scale. The BENCH commonly assumed to be the crowning point of the lawyer's ambition consists of the Lord Chancellor, the Judges of the Courts of Appeal, and of the High Court of Justice, including the Chancery, Queen's Bench, and Probate, Divorce, and Admiralty Divisions; the Lord Chief Justice, the Dean of Arches, the Attorney-General, and Solicitor-General, and fifty-six county court judges. Next to these rank the Queen's Counsel.

LIBRARIANS.

The spread of free and public libraries has produced considerable demand for librarians and assistants. To those of

a literary turn, the work is particularly congenial, though the pay is not perhaps princely. At Bristol and several other large libraries, ladies perform the work. This consists chiefly in entering the names of readers, indexing, booking subscriptions, attending to the requirements of readers, and in the small libraries it is customary for the assistants to repair the backs of books when needed. A good education and address are necessary. The remuneration is from 7s. 6d. to £2 per week; chief librarians often receiving £200 or £300 per annum. Applications should be addressed to the librarians of local libraries.

LINEN-DRAPERS' ASSISTANTS.

In this trade the demand is not at present at all equal to the supply. We were informed by one of the leading Metropolitan tradesmen that he received over one hundred replies to an advertisement for an apprentice. In those establishments where apprentices are received, the premium varies from £10 to £50. Apprenticeship is usually for three years. Board is supplied, and at the termination of the term the apprentice is usually taken on as an assistant, when he or she will probably receive £15 to £25. To this amount the premium which is allowed on the sale of special articles should be added. There are numerous opportunities for a rise, and it is a fact that most of the leading tradesmen in this branch have risen from the counter. A shopwalker will receive as much as £150 per annum in a good house, and a careful man can easily save enough to start a small business. Buyers make, in some instances, really large incomes, and have excellent opportunities for advancement. We have heard of many who have received as much as £1,000 per annum. Country orders in drapers' establishments are usually made up by female assistants. They consist of writing and sending patterns; they receive a fixed salary, and, of course, they are not able to earn premiums or commissions. The cashiers are most frequently women. (See Female Clerks.) In some houses apprentices are given book-keeping to do at first, but they should not be allowed by their parents to stay long, as, if they are found to be willing and proficient and do not object, it is probable that they will be kept at the work so long as they are not rebellious. There are numerous advantages attached to this occupation. The comfort of

the employés is in some cases, we regret that we cannot say all, a matter of concern to the employer. Comfortable dormitories are provided, and good sitting-rooms and reading-rooms in addition. In other establishments there are pianos and libraries. The hours are long, too long it is said by the men and women who stand behind the counter. The holidays are from a week to a fortnight, and they are paid wages for the period of absence. As a rule the hands are allowed to go out after working hours, and to stay out to 10 p.m., and till 12 o'clock one night in the week. Special leave must be obtained to sleep out. (APPRENTICES TO THE MILLINERY, see Dressmaking.) Window dressing is a branch of the work which is now attaining the dignity of an art. Men and women with a taste for the work are able to earn good incomes. Those who wish to enter a linen-draper's should either watch the advertisements in the papers, or make a personal application at a shop.

LITERARY WORK.

Literary work may be divided up into branches :—(1) The Press ; (2) Authorship ; (3) Compilation. As the Press gives employment to by far the largest number of persons of both sexes, we will deal with it first. The Press affords a moderate prospect of a livelihood to those able to write freely and with judgment upon a variety of subjects, to expert short-hand writers, and to specialists in any of the prominent branches of useful knowledge. It gives no scope for genius, or genuine originality and powers of composition, and the work is frequently severe. The remuneration is about equal to that of a first-class bank ; but, as in most other branches of mental labour, the earnings depend almost entirely on personal capabilities. Junior reporters upon small provincial papers, earning perhaps 15s. to £1 a week, and occasionally assisting in printing the paper, have been known to rise to positions of prominence, and the Press has this advantage, that a man's work and powers can be seen. It is impossible to hide successful newspaper work under a bushel. Rival newspaper proprietors are ever on the look-out for smart men, and are loth to lose a valuable assistant; for it is a well-known fact in the newspaper world that the majority of new ventures are promoted by newspaper men who have been underpaid or unfairly dealt with by their employers. A good man has

therefore excellent prospects of advancement. Editors are men who have frequently gone all the way up the journalistic adder. Commencing as reporter, they have had excellent opportunities of becoming thoroughly acquainted with the news department. A favourable opening, assisted by the exercise of talent and discretion, has then placed them in the position of sub-editor, or of assistant sub-editor. They have perhaps worked on for years in this capacity, and have become thoroughly acquainted with the policy and scope of the paper, the prejudices of its readers, and its proprietor, and the departments in which special knowledge is required. Another favourable turn of the wheel of fortune and they are in possession of the coveted place—the editorial chair. As reporter on a country paper they will have earned from 15s. to £4 a week; as sub-editor (we are now referring to the provincial Press), £1 10s. to £10 a week, and as editor from £2 to £20. We are quoting actual figures, and have no hesitation in stating that the sums mentioned in stray newspaper paragraphs are greatly in excess of the real salaries paid. The Metropolitan papers are supposed to offer a somewhat more liberal scale. A reporter (general) on a London "daily" earns from £3 to £7 a week. A parliamentary reporter from £4 to £12. A sub-editor from £5 to £16. An editor from £500 to £2,000 a year. In addition to the reporters, sub-editors, and editors, there are leader writers and descriptive reporters. These are fairly highly paid. The salary of a leader writer on a London paper is from £500 to £1,500. On some journals the leader writers are paid by columns, and on these the rate of remuneration is from £1 to £5 per column. Descriptive writers receive salaries, and a few are paid by measurement. The salaries are from £3 to £15 per week, and the rate per column from £1 to £3. On weekly journals the rate of remuneration varies. The majority do not remunerate their writers so well as is generally supposed. We have taken fifty well-known journals, and, averaging their ordinary terms, find that the pay is at the rate of 12s. 6d. per 1,000 words. Some giving as little as 5s. a page, while others pay a great deal more, *e.g.*, *Tit-Bits*, which offers £1 1s. per column. From the point of view of the employés, the Press as a profession has suffered considerably from the introduction of news and reporting agencies, which employ reporters, and manifold their news for numbers of newspaper proprieters in all parts of the

country. The chief of these are the "Central News" and the "Press Association." These sends telegrams, reports in MS., and "London Letters" all over the kingdom. The services of a number of writers are thus dispensed with, and newspaper proprietors are able to save a considerable sum in the course of each day. In America this system has reduced the remuneration of reporters and descriptive writers 50 per cent. The introduction of a number of new journals devoted to the interests of the fair sex has done much to open the gates of the Press to women, and at the present time large numbers are employed in all parts of the country. The fiction weekly papers are almost entirely written by women, as are those reporting progress in the fashions. Women do a great deal of book reviewing, of the reporting of social events, and of "London Letter" writing. By consulting *The Daily News*, in which advertisements of vacant reporterships, &c., are most frequently inserted, any young man would, in the course of time, be able to obtain a humble reportership, from which, if he is of an inspiring disposition, he may rise to better things. Authorship is distinct from newspaper work. It is usually understood to mean the composition of fiction, of biographies, of works on social subjects, travel, and any description of literary work requiring the exercise of originality. Most of those employed in literary work of any description commence by writing a story. Many start with a burst of rhyme. This last is so absolutely unremunerative that it cannot be seriously considered as a way to earn a living. Clever writers of fiction are able to keep the wolf from the door, and some are in receipt of respectable incomes. After testing one's skill by writing short stories for magazines and other publications which devote attention to fiction, a novel of considerable length, sufficient to make a one or three volume story should be addressed (with stamps to pay for the return if not accepted) to a first-rate firm of publishers. Messrs. Bentley, of Burlington-street, W., have the reputation of reading every MS. which is sent to them. It is certain that they have "brought out" a large proportion of the leading writers of this decade, and it is well known that they pay liberally. Advertising sharks should be avoided. Their only aim is to obtain money from unsuspecting writers of inexperience, and they generally manage to rob those whom they get into their toils considerably. During the past few years they have been exposed in many papers; but, as their adver-

tisements still appear, there is no doubt that they are still engaged in their nefarious work. Their advertisements may easily be detected. They generally address their announcements to "Authors, Amateurs, and others;" sometimes it is fiction, at others poetry that is wanted. But in every case it is plunder that is meant. Mr. Walter Besant has laid down the axiom that no one should pay for the publication of his literary work. In the majority of cases this is a good rule, though, like many another good rule, it has its exceptions. No stated sums can be made as to the pay of authorship; it depends entirely upon the talent of the writer. Novel-writers get from £50 to £1,000 for a book. The modern novelist usually manages to run each story he writes through a magazine and a number of provincial and colonial newspapers before issuing it in book form. Compilation is a more important branch of the literary profession than is usually supposed. At the British Museum, in London, there are a number of ladies and gentlemen employed by publishers in the preparation of biographies and other works. Many well-known writers employ assistants of this description. No rule can be laid down as to the rate of pay. It is entirely a matter of arrangement. Clever workers can make a good deal. Other literary work is to be had after experience has been gained in some practical manner. Original ideas are well paid for in literary work as in any other.

LOCKMAKING.

The locksmith's trade is hardly practised in any other county but Staffordshire. Owing to the competition with Germany and the United States, the prices are now so low that wages have been necessarily reduced. Like the watch trade at Coventry, the trade is in the hands of small men, who work for big factors. The best locks are made in Wolverhampton, and a smart journeyman can earn as much as 40s. a week. At Walsall, Bloxwich, Brewood, and Wednesfield, wages are considerably lower, the class of locks being of a cheaper kind altogether. Women are not much employed now in the lock trade. They do some of the lighter work, and most of the packers are young girls. Skilled young locksmiths, and men of ideas in particular can make good wages, and in the course of our inquiries we came across several who had migrated from other trades, and were

making as fitters as much as £3 a week. A really first-class mechanic in this trade can take home from £2 to £2 10s. a week.

MACHINE-MEN (see Printers).

MARKET GARDENING (see Agriculture and Fruit Farming).

There is considerable scope for enterprise in this respect. The old-fashioned market gardeners keep too much to the growing of standard varieties. Of late the tomato has become much more general as an article of food, and the public are beginning to find out that English tomatoes are much superior to foreign. Mushrooms, always profitable, are now more widely consumed than heretofore. A young man who has been apprenticed in the manner described n our section on fruit farming, should, when starting, take these facts into consideration. He will, of course, not overtrade his capital. The great bane of market gardeners in this country is the expense of heat, and glass. Hot-houses should be added little by little, as capital increases. The cultivation of cut flowers, now that table decoration among the upper and middle classes is universal, is said to be remunerative. It can be carried on in conjunction with market gardening with facility, the channels of trade being similar. In order to start without fear of failure, a capital of at least £200 must be laid out.

MASSAGE.

Women are almost entirely superseding men in this work. Massage, we may inform the uninitiated, is the new term for the old-fashioned "Medical Rubbing." Women are said to perform the work with more delicacy than men, but none but exceedingly strong and healthy members of the sex should attempt it. A practical knowledge of the Swedish gymnastics, anatomy and physiology is the first qualification. At the Women's Medical College, 30, Henrietta-street, W.C., instruction can be obtained for a low fee. A good plan would be for the *masseuse* to address personally, or by letter, the leading West-end doctors, some of whom would probably be able to give work. The remuneration made by clever *masseuses* is often considerable, and cases are on record in

which ladies earn from £6 to £10 a week. One in the West-end of London is able to keep a carriage, but the usual pay is half-a-crown an hour.

MATRONS.

To become the matron of a school, the qualifications are that the applicant should be a thoroughly good housekeeper, should be of a methodical and practical mind, and should be well able to deal with tradespeople, and to control servants. The salary of a matron of a good school varies from £50 to £150 per annum. These appointments can be obtained from advertisements in leading newspapers. Good testimonials are absolutely necessary. Hospital matrons must be well acquainted with hospital work. The duties are difficult. They require the exercise of much tact, and good temper. The appointments are advertised in the leading daily papers. The remuneration varies according to the position of the hospital. In leading hospitals the matrons would receive as much as £100 per annum, but the average salary is £52. Matrons of cottage hospitals should be possessed of numerous qualifications. They should be well able to purchase, control, and to nurse. Matrons of lunatic asylums receive from £40 to £50. They are expected to be well acquainted with the care of the insane. Matrons of homes and orphan asylums must be strong, and well up in the care of children. They are expected to do all manner of household work, and must be able to educate young girls as servants. They receive from £30 to £60. Matrons are usually pensioned after a number of years' service. It must not be forgotten that they receive their board and lodging, as well as their pay. In a few cases they are also provided with uniform.

MEDICAL DRAWINGS.

The task of drawing for doctors is not a pleasant one. Curiously enough the work has fallen almost entirely into the hands of ladies, who are said to be much more accurate and painstaking. By applying to well-known doctors, work can often be obtained, and advertisements occasionally appear in the medical press. The rate of pay is from £1 1s. to £3 3s. per sketch.

MEDICAL STAFF CORPS (See Army).

MEDICAL WOMEN.

Lady doctors are by no means rare nowadays. We find one or more in almost every large town, and in London people have got quite used to seeing Dr. Elizabeth Jones, or calling in Dr. Mary Smith. There can be no doubt but that this is a capital field for ladies of congenial tastes, and, so soon as the prejudice against medical women has passed away, the profession will no doubt become a really popular one with the sex. The training of a woman doctor is similar to that of a man. She has first to pass the ordinary preliminary examination required by the General Medical Council, mentioned in the foregoing section. She will then enter the London School of Medicine, 30, Henrietta-street, Brunswick-square, W.C. The course of education is somewhat as follows:—Chemistry, practical anatomy, the materia medica, physiology, pathology, pharmacy, surgery, obstetrics, vaccination, clinical work, and the various minutiae of a medical education. The cost is exactly the same as for a man. At the conclusion of the fourth, and when the final professional examination has been passed, the lady doctor can claim to be registered, and start a practice of her own. Economy can be practised by lady doctors in the course of study by the winning of one of the scholarships offered by that generous institution the National Association for the Promotion of the Medical Education of Women, 13, Randolph-crescent, Edinburgh, and by applying to the Hon. Secretary of the London School of Medicine, 30, Henrietta-street, Brunswick-square, W.C., some particulars of other prizes and scholarships can be obtained. Ladies with money can join the Zenana Medical Mission Society, which assists ladies with moderate means in going out to India. There are several societies of this nature, and one or two more in progress of formation. They are as follow:—The Indian Female Normal School, 2, Adelphi-terrace, Strand, W.C.; The Delhi and South Punjaub Zenana Medical Mission, Secretary, Canon Crowfoot, Minster-yard, Lincoln.

MEDICINE.

Before entering upon the strictly medical portion of a doctor's career, it is necessary to pass a preliminary examina-

tion. This examination is about equal to the College of Preceptors' Senior, or the Oxford and Cambridge Local Senior. The London Matriculation examination is considered the best preliminary. The student who has passed this examination has to place has name upon the list of medical students, kept by the General Medical Council. No time should be lost in doing this, as a student cannot practise unless his name has been on the list for four years. There are nineteen bodies able to start a medical man on his career. They are as follow :—The College of Physicians, Ireland ; the College of Surgeons, Edinburgh ; the College of Surgeons, England ; the College of Physicians, London ; the Faculty of Physicians and Surgeons, Glasgow ; the College of Physicians, Edinburgh ; King's and Queen's College, Ireland ; the Society of Apothecaries, London ; the Apothecaries' Hall, Dublin ; the Universities of Oxford, Cambridge, London, Edinburgh, Dublin, Aberdeen, Glasgow, St. Andrews, Durham, and the Royal University of Ireland. It would be impossible, in the space we are able to devote to the subject in this work, to give the special arrangements of each of these bodies. Full particulars can be obtained from the secretaries. On registration the student must select the qualification which he thinks most desirable or suitable to his purse and brain. Brains and money generally select London. It is expensive and difficult ; but the L.R.C.P. degree is a good one ; or, if entering for both physic and surgery, the M.R.C.S. should be obtained as well. In order to obtain the doctorate, which an ambitious man finds indispensable, the examinations must all be taken in regular course. In the cases of Edinburgh, of Glasgow, of St. Andrews, Newcastle (for Durham), and Dublin, residence is an absolute *sine qua non*. This is not so in the case of London. A really capital medical training can be obtained abroad ; but foreign degrees are not recognised by our hospitals, nor do they qualify the holder to practise. After registration, the medical student should not enter the hospital medical schools at once, but should devote at least twelve months to steady reading and study, as a preliminary to more practical work. He can then enter for the preliminary scientific, or first "Professional" (College of Physicians) examination, having passed which he may at once enter the medical school in whatever hospital he has selected. Here his attention is turned to the particular branch of practice he may have

in view, and his training will be guided accordingly. The cost varies in different cases; but in London the total expenses of passing the medical curriculum in one of the hospitals, including the necessary books and instruments, and obtaining the M.B. degree, may be stated at about £160. This is, of course, irrespective of living. After the second winter of this course, he will be prepared to enter for the final examination. This will place him in the rank of L.R.C.P., or M.R.C.S.—Licentiate Royal College of Physicians, or Member of the Royal College of Surgeons. This examination confers upon him the diploma, which is his authority to practise, whether it be the licence or diploma of one of the medical colleges, or a University degree. The ordinary degrees are Bachelor and Doctor of Medicine, and Bachelor or Master in Surgery. A physician is a graduate, or licentiate in medicine of a University, or a fellow, member, or licentiate of a college or faculty of physicians. The surgeon is qualified in a similar manner, *pari passu*. An apothecary is a licentiate or fellow of a Corporation of Apothecaries, and, as a rule, does not practise in surgery. On all points of detail in these courses the student will obtain all information from any of the colleges where his training is passed. Speaking of the nineteen qualifying bodies, generally, we may say that, as a rule, there are usually two or three examinations included in the course for licence or degrees, the fees for which vary from one guinea up to £50 to £60, for the highest fellowships and doctor's degrees. But the general fees for the minor examinations are from three to five guineas, and somewhat higher for the finals. Scholarships are fairly plentiful in every case, and the entering student has thus always before him the possibility of covering the large cost of his training by his own efforts in connection with it. Before commencing practice in any capacity, his name must be entered upon the register of the General Medical Council, which body constitutes supreme authority of the profession. It consists of members entitled by all the qualifying bodies, and of representatives appointed by the Crown, and forms a species of court of reference on all professional matters of importance. Without being so registered, the practitioner cannot legally recover his fees for professional services; and there is a penalty of £20 for compounding and selling medicines of his own prescription if unregistered. It is also a rule that a purely medical practitioner cannot

recover fees for surgical advice, nor *vice versâ*. An apothecary can claim for medical services only. Following up the matters of importance, for the guidance of students contemplating service in the Army or Navy: for the Army Medical Department the candidate must possess two diplomas or licences, recognised by the General Medical Council, and must have been duly registered. He must be under 28 years of age on appointment as surgeon on probation, for vacancies in which class there are held two competitions yearly. On appointment, the successful candidate will be sent to one of the stations, for a course of instruction in the Ambulance and Hospital Corps duties. He will then pass through the course of the Army Medical School, and is commissioned as surgeon. Candidates for the Naval Medical Service must be over 21 years of age and under 28. The examinations are held from time to time by the examining board after passing which, the candidate must go through the full course of instructions at Netley, during this time an allowance of 5s. per diem is granted towards maintenance. On passing the final, he is qualified for commission as surgeon. The pay varies from 11s. to 17s. per day, according to period of service. After three years duty, he can enter for an examination to qualify as staff surgeon; but is not so promoted until five years service, two of which must have been passed in a ship at sea. The pay as Staff Surgeon is from 18s. to 22s. a day, further increasing on promotion as Fleet Surgeon, or Inspector General, to from 30s. up to 50s., according to service. There are also allowances for maintenance of £39 to £85 per annum on home service, and £108 to £130 abroad. Medical practice is usually divided into (1) Consulting, and (2) Special. As to the description of practice to be adopted, the professional man can only be guided by circumstances and opportunity. He will learn more on these points by the unwritten law of etiquette than by study. What is called a general practice combines medicine, surgery, and midwifery; but, in all the greatest centres of population, the tendency is towards specialism. On the question of the comparative prospects in home, colonial, or foreign practice, it may be said, generally, that a man who has the courage and judgment to plant himself on the outskirts of civilisation, where there is a growing population, opens a fair prospect. A self-made practice in the colonies is an improvement upon a feeble old one at home. In buying practices the utmost caution

must be exercised. We regret to state that there is considerable swindling carried on in this respect. In addition to ordinary practices there are appointments on the staffs of insurance offices, hospitals, schools, and many other institutions. Invalids of means, and noblemen, frequently engage physicians and surgeons to reside with them. The charges for admission to various societies are as follow :— British Medical Association, admission fee two guineas, annual subscription one guinea. Obstetrical Society of London, admission fee one guinea, annual subscription one guinea. Clinical Society of London, admission fee two guineas, annual subscription one guinea. Pathological Society of London, admission fee one guinea, annual subscription two guineas. Sanitary Institute of Great Britain, admission fee three guineas, annual subscription two guineas.

MERCHANT SERVICE, THE.

It is not within our province here to deal with the question of "going to sea." This must be settled by the parents of a lad. Having settled the matter in the affirmative, the next thing to consider will be how to go to sea. Here "1,000 Ways to Earn a Living" can be of material assistance. Briefly, we can say there are four ways open to lads who are desirous of entering the Merchant Service. The first is as a —wrongly described—"midshipman;" the second is as a premium apprentice, the third, as a non-premium paying apprentice; and the fourth, as a boy. Only the minority of firms now take "midshipmen." The method is the most expensive of all to the parent, though there is not the slightest doubt, among those who are well acquainted with this matter, that it is, from the maternal point of view, the most satisfactory. The cost is about £60 or £70 for the first voyage. An intelligent midshipman is taken for other voyages at a considerably reduced premium. The midshipman, if he is industrious, may pick up a great deal of useful knowledge. If, on the other hand, he is lazy, there will be nobody to reprove him, for the captain will not naturally do more than he considers is his duty, and, as a captain told us in the course of our inquiries, "we have something else to do besides nursing a lot of youngsters." The midshipman has none of the dirty work of the ship to perform, and he can

give all his time to navigation or seamanship. When in harbour, the Mid. is put in charge of a boat. However, there are now very few "midshipmen," and none but the children of parents of means are able to go in this capacity. APPRENTICES are taken by shipowners at premiums varying from £15 to £70. They are, in most vessels, treated no better than members of the crew. Generally they are forced to live in the "fo'c's'le," not at any time a desirable place for a lad. Sea apprentices are obliged to sign indentures very similar to those in ordinary trades. The period of service is four years. It should be stipulated that the premium is returned in the form of wages. The work is that of doing what the men think beneath their dignity—we speak that which we do know, and are treating of the majority, not of the minority of ships. No parent should bind his son without ascertaining whether the ship has special accommodation for apprentices, and whether she carries other apprentices. A few firms charge as much as a hundred pounds premium. This would certainly ensure fair treatment. Apprentices without premiums are usually carried on small coasting sailing ships and fishing smacks; they live and mess with the crew, and their lot is a terribly hard one. Occasionally they receive 8s. or 10s. a month wages for clothes. BOYS are generally carried by steamships which do not carry apprentices. They are often also taken on sailing ships. In a steamship the duty of a boy is to wait on the officers. He receives for his first voyage from 20s. to 30s. a month, and if he proves useful, he might get from 30s. to 40s. a month for the second voyage. If he is quick, he will get a capital insight into the duties of steward and cook, and on the whole this is one of the best methods of entering the marine service. If a boy enters at 16, he could, on reaching the age of 20 or 21, easily obtain a berth as steward or cook; and as stewards in cargo-carrying ships receive from £5 to £8 a month, and in large passenger vessels from £8 to £12 a month, it will be seen that the remuneration—which includes food—is good. A cook in a cargo-carrying vessel gets from £4 to £6 a month, and in passenger ships from £7 to £10. Some masters of sailing-ships prefer boys to apprentices, because they are amenable to discipline. They are usually employed in rough work on deck, and learn quite as much as the apprentices. They receive from £1 for the first or second

voyage ; and, if they prove useful to the master, may get promotion to ordinary seamen, and receive from 35s. to 40s. a month. Those whose parents cannot afford to pay the premium, should consider themselves lucky if they can get to sea in this capacity. There are two training-ships for officers for the marine service, the *Conway* and the *Worcester*. The *Conway* is at Liverpool, and the *Worcester* is situated at Greenhithe, on the Thames. The charge for the *Conway* is £52 10s. (for sons of naval officers, £42) ; the charge for the *Worcester* is from £57 to £63 a year ; and the average period of training for both ships is two and a half years. The other training-ships are either for homeless or destitute lads, or for those from reformatories. A boy trained on the *Worcester* or *Conway* is allowed by the Board of Trade, on going in for his certificate, to count one year of training as actual sea service. In every port of Great Britain having a considerable foreign trade will be found branch offices of the Board of Trade, known as Mercantile Marine offices. At those establishments a register is kept of boys who have applied for berths on board ship, and those wishing to go to sea should write to one of these offices. An apprentice's indentures must be made out before a Superintendent of a Mercantile Marine office, and at the time a record is kept of every such indenture, in order that, in case it is lost, the apprenticeship can be verified In small ports officers of the Customs are authorised to act in the capacity of Mercantile Marine officers ; and they, as well as the establishments above mentioned, will furnish any applicant with the names of all shipowners in that particular port requiring apprentices or boys. Another way to get to sea is to personally apply on board ships. Sometimes a berth can be obtained in this manner, if the parent accompanies the lad ; but, before finally deciding on a sea life, the boy should just consider these few facts :—(1) About three-quarters of those who go to sea are utterly weary of the life at the end of the first voyage, and many would willingly go home, in any capacity, after a week of it. (2) A master of a ship is as much a monarch as the Czar of Russia, and, when at sea, can and does most frequently treat his crew, and especially the younger members of it, with cruelty. (3) The food is not merely bad, but, on long voyages, loathsome. (4) Considerable diligence and book learning is required to make progress. (5) After years of toil and hardship, it is

probable that one will not be able to obtain the captaincy of a vessel, owing to the terrible competition. Whatever romance there was in life at sea about 40 or 50 years ago, there is none of it left now. On completing an apprenticeship, the sailor-lad should endeavour to obtain his certificate as second mate. For this the qualifications are, that he should be 17 years of age, have been to sea not less than four years, pass an examination in seamanship and navigation, and produce testimonials from masters under whom he has served for the last twelve months for sobriety and ability. This examination, to one fresh from school, would be comparatively easy; but during the four years that have elapsed between school and the apprenticeship, it is probable that the boy, unless he has kept up his reading, will have forgotten all his arithmetic and mathematics; it is therefore wise during the apprenticeship not to lose sight of the books provided for those about to enter this examination. A certificate as first mate, or simply mate, as it is called, can be obtained by those aged nineteen, who have been to sea five years, for one of which they have been second mates; the usual testimonials as to sobriety and ability should be produced. A master's or a captain's certificate can be obtained on reaching 21 years of age, with six years' sea experience—one year as second mate and one year as first, with the usual testimonials. But it is not often that young men obtain a master's certificate at this age, though it would not be at all unadvisable to attempt it. A certificate as extra master is only granted after an exceedingly severe examination. It is not necessary for a man to obtain it at all; but, once secured, it will enable him to command the largest ship afloat. In these days competition is so severe, and so many men hold master's certificates, that the majority of large steamship companies will not give a man a command without one. It can be obtained at the same time as the ordinary master's certificate. To obtain a second engineer's certificate, the candidate must have served three years at least in an engineer's workshop, and he must have been one year at sea, and be 19 years of age, or more. A chief engineer should possess all the qualifications of a second engineer, and, in addition, must have attained his majority, and have served one year at sea in the capacity of second engineer. The four years of apprenticeship may be very profitably spent by those who mean to get on. It is to be regretted that the

temptations to run wild on landing in a foreign land, after several months of the sea, tend to the moral deterioration of many apprentices. Some of them are foolish enough to run away from their ships ; others are content to neglect to pick up useful information, and fill up their time with menial work, such as washing, polishing, and odd jobs. The wages on vessels are :—

SAIL.

	Per month.
A.B.	£2 10 to £3 0
Carpenter	4 0 to 7 0
Boatswain	4 0 to 7 0
Steward	3 10 to 8 0
Cook	3 0 to 6 10
O.S.	1 0 to 2 0
Boys	0 10 to 1 5

STEAM.

	Per month.
A.B.	£3 0 to £4 0
Firemen	3 10 to 4 5
Carpenter	4 10 to 9 0
Boatswain	4 0 to 8 0
Steward	5 0 to 12 0
Cook	4 0 to 8 0
O.S.	1 0 to 2 10
Boy, or mess-room steward	1 0 to 2 10

The wages of officers are as follow :—

SAIL.

	Per month.
Second mate	£4 to £7
Chief mate	5 to 10
Master	10 to 25

Wages depend very much on size of ships.

STEAM.

	Per month.
Second mate	£5 to £8
Chief mate	6 to 14
Master	12 to 40
Second engineer	8 to 14
Chief engineer	12 to 25

Some of the large lines (the P. & O. and B.I.) pay their officers higher wages than given above. On reaching the shore, the wages paid should be immediately placed in the hands of the Board of Trade officials, who will give the sailor sufficient to find his way home, and forward

the rest by post. This will save him from the harpies of all kinds who haunt every port. The food supplied to sailors is not at all good, though it has improved of late years. The tea and coffee are not exactly as served in West-end drawing-rooms. We here print the usual scale of provisions allowed on sailing-ships and steamships, kindly given us by the Board of Trade, to which we are indebted for most of the information in this article.

SCALE OF PROVISIONS to be allowed and served out to the crew during the voyage, in addition to the issue of lime and lemon juice and sugar, or other anti-scorbutics in any case required by 30 and 31 Vict., c. 124, s. 4 :—

	Bread lb.	Beef. lb.	Pork. lb.	Flour. lb.	Peas. pint.	Rice. lb.
Sunday	1	1½	—	½	—	—
Monday.....	1	—	1½	—	⅛	—
Tuesday	1	1½	—	½	—	—
Wednesday ...	1	—	1½	—	⅛	—
Thursday	1	1½	—	½	—	—
Friday	1	—	1¼	—	⅛	—
Saturday	1	1½	—	—	—	⅛

In addition to above there is an allowance of ⅛ oz. of tea, ½ oz. coffee, 2 oz. sugar, and 3 qts. water daily.

NOTE.—In any case an equal quantity of fresh meat or fresh vegetables may, at the option of the master, be served out, in lieu of the salted or tinned meats, or preserved or compressed vegetables. No spirits allowed.

Every master should keep on board proper weights and measures for the purpose of determining quantities of the several provisions and articles served, and shall allow the same to be used at the time of serving out such provisions and articles in the presence of a witness, whenever any dispute arises about such quantity, and, in default, shall for every offence incur a penalty not exceeding £10. (17 and 18 Vict., c. 104, s. 225). Apprentices get the same food as the crew. Those going to sea, very frequently fall into the hands of the slop-dealers, who endeavour to make them purchase as much as possible. All that is necessary for a midshipman or premium apprentice is the following list of articles. The prices we obtained from a well-known shop in the neighbourhood of the docks :—

OUTFIT FOR MIDSHIPMAN AND PREMIUM APPRENTICE.

Two complete uniforms at £3 10s.	£	7	0
,, caps with badges at 3s. 9d.	0	7	6
,, blue serge trousers at 4s.	0	8	0
,, ,, ,, jackets at 4s.	0	8	0
,, ,, ,, vests at 3s.	0	6	0
One Pilot jacket	0	15	0
,, ,, trousers	0	12	6
,, ,, vest	0	6	0
,, oilskin jacket	0	8	0
,, ,, pants	0	5	0
Two pair of boots at 21s.	2	2	0
,, ,, ,, sea boots at 17s. 6d.	1	15	0
One pair of leather slippers	0	3	6
Twelve pairs thick socks at 1s.	0	12	0
One sou'-wester	0	2	6
Six Crimean shirts at 4s. 6d.	1	7	0
,, white ,, at 3s. 6d.	1	1	0
,, flannel singlets at 3s. 6d.	1	1	0
,, ,, drawers at 3s.	0	18	0
Twelve pairs thin socks at 1s.	0	12	0
,, handkerchiefs at 9d.	0	9	0
Six towels at 6d.	0	3	0
Comb and brush	0	3	6
Bed and pillow	0	6	0
Three pair blankets	0	15	0
,, ,, sheets	0	10	6
Two sea-chests at 10s. 6d.	1	1	0
One canvas bag	0	2	0
	£24	0	0

CHEAP OUTFIT FOR APPRENTICES WITHOUT PREMIUM, AND FOR BOYS.

One suit clothes	£1	10	0
,, oilskin jacket and pants	0	11	0
,, serge jacket, trousers, and vest	0	10	0
,, bed and pillow	0	5	0
Two pairs blankets	0	7	0
,, singlets at 2s. 6d.	0	5	0
,, drawers at 2s. 6d.	0	5	0
Three flannel shirts at 2s. 6d.	0	7	6
One sou'-wester	0	1	6
One cap or hat	0	2	6
Six pair socks at 9d.	0	4	6
One pair boots	0	12	6
,, ,, sea-boots	0	14	0
,, sea-chest	0	10	6
	£6	6	0

The Mercantile Marine service has risen greatly in importance during the last few years. The creation of the Royal Naval Reserve force has opened a way to honourable distinction to every young officer of the Mercantile Marine, as the Lords of the Admiralty have placed within his power the means of allowing him to enlarge his professional education, by according to him the privileges of studentship at the Royal Naval College, Greenwich. The great steamship companies, such as the Cunard, The Royal Mail, the P. and O., and the like, do not take apprentices or midshipmen. The post of fifth officer is the first that is open for a young man in the large ocean-going steamers; and, before he can become a candidate for that situation, he must possess a Board of Trade certificate of competency as second mate. To be eligible for the rank of fifth officer, candidates must be over 17 years of age, and have served at sea not less than three years. In addition, a slight educational examination has to be passed. ASSISTANT PURSERS must not be less than 20 years of age. They are required to undergo an examination in writing English correctly from dictation, and to possess a competent knowledge of arithmetic, exchanges, calculation of seamen's wages, and of cubing cargo. They must also possess a conversational knowledge of some foreign language, and a preference is given to those who can speak French, Spanish, and Portuguese. All candidates, for whatever appointments, are required on entry to insure their lives, and to pass a medical examination.

METROPOLITAN FIRE BRIGADE.

This is an important force. It consists of more than 400 men. London is cut up into a number of sections. These are under the care of superintendents. Every district has its complement of stations and engines. Candidates should apply at the principal station, Southwark Bridge-road, S.E. The chief officer, Captain Eyre M. Shaw, will then interview them personally, and examine them as to their qualifications. Aspirants must have been at sea for three or four years. The limit of age is under 25, and of chest measurement not less than 37 in. The height must be over 5 ft. 5 in. Much care is taken in the selection of these men. They are required to display unusual intelligence for their class, must produce certificates of birth, and of service at sea. Bodily

strength is severely tested in the examination. A medical examination is undergone, and a number of apparently strong and well-made men are refused, so stringent is the regulation. After passing the examinations, drill classes are attended, and the general working of a station is taught. It is not for some time that the embryo fireman attends conflagrations. After some months he is allowed to ride on the engine and perform the simpler portions of the work of fire extinguishing, which has now, it should be mentioned, almost attained the dignity of an art. Each district is governed by the superintendent, and the officers, who are known as first and second class engineers, are selected from the ranks.

MILITIA (see Army).

MUSIC.

As a way to earn a living, music has made a distinct advance during the past ten years. There are two methods by which musical tastes may be turned to pecuniary account, by composing and by teaching. Both ranks, it is true, are much over-crowded; but in this, as in all other work, there is always plenty of room—at the top. Vocalists, both teachers and executants, all raise the bitter cry that competition is killing them; yet it cannot be denied that the field of their labours was never so wide and remunerative as at present. Musical aptitude, unlike other talents, is usually partially developed at a very early age. There can be no difficulty, therefore, in finding out whether or not a child should receive a musical education. Fond parents must be warned against the common fault of considering that a girl or boy with a good "ear," and somewhat unusual execution is a genius. There have been hundreds of lads who have been able to take charge of an organ during a church service while in their early teens, but few of these have risen to distinction. A really masterful musical temperament is made up of several distinct gifts, varying in a marked manner in different individuals, and liable to be mistaken by their possessors. The discrimination of "tone," the perception of "form," the power of memory, rapidity of eye, correct instinct in harmony, and the faculty of imagination, are qualities so distinct in kind that persons with a remarkable development of one will often be singularly deficient in another. Thus it happens

frequently that a peculiarly gifted harmonist never acquires a facility in sight reading; or an accomplished manual performer is wanting in the power to control the performances of others. Disappointment in the pursuit of music as an occupation has often resulted from the choice of one branch, when the particular qualifications of the individual pointed to another. As a rule, musical training can hardly be commenced too early; the only exception to this being the training of the adult voice, which should not be commenced in any case, nor at any fixed age in either sex without the advice of an expert. Children of both sexes should always be allowed, though not driven, to sing, and preferably from notes, if they show any aptitude for doing so. In every other department of music success depends so largely upon mental and manual dexterity, only to be acquired by years of steady practice, that the earliest indications of fitness should be taken advantage of. This, of course, applies especially to every description of instrumental study. As preliminary to the profession of music, a word may be said concerning the value of a good general education, especially in regard to modern languages. This is frequently lost sight of, as it is thought that the successful average musician is, of all people, one of the most likely to stay at home. That may be—especially now that the facilities for a musical education in this country are so vastly extended and improved. But, with a view to a thorough knowledge of standard music, the beginner may be assured that nothing will stand him in better stead practically than a sound knowledge of one or two European languages. Taking the question of training from its first beginnings, the present philosophy—though not, it is to be feared, the practice—is against the over-driving of children. This is more frequently the case in music than in any other branch of education. Children, even up to the age of 12 or 14 will, if naturally qualified, generally be found ready under sensible guidance to submit themselves to a moderate routine of real work. It is within this period that the discerning instructor will form a judgment as to their capacity. Being concerned mainly with those systems of training which are open to all classes, we will deal one by one with the chief institutions devoted specially to musical education. It need hardly be said that in all the universities and higher colleges throughout the country more or less prominence is given to music in the course of instruction. The Royal

College of Music, Kensington-gore, S.W., is incorporated by Royal charter, and is open to all British subjects. The fee on admission is £1 1s., and the terms, £40 per annum. Admission is not given for a less time than one year; the full course is three years. Arrangements are also made for education and maintenance, inclusive, at £100 a year. There are three terms in each year, during which lectures and practice can be attended in every discription of vocal and instrumental work. Scholarships are tenable for three years, and are the equivalent of a free course of instruction. Various prizes and exhibitions are also open to the competition of students, according to choice. The Associateship of the College is attained by examinations held annually. The National Training School of Music in Kensington-gore requires on admission the certificate of birth, and also one of health, and of good character. Admission is obtained by gaining a scholarship, for which nomination must be given by a founder, or by payment in advance of the fees for one year—£40. There are three terms in the year. The lectures and practice afford complete instruction, the scholarships being the equivalent of a free course. At Trinity College, Mandeville-place, Manchester-square, instruction is given in general subjects, but music is the leading feature. There are separate fees for all the courses, and for instruction on different instruments, varying from twenty-five shillings to three guineas, of which the student may avail himself according to choice, or a compounding fee of five guineas per term may be paid for any three of them. There are numerous scholarships, exhibitions, and medals awarded for merit. Higher examinations are also held for the diploma and licentiateship, and local examinations for the same and for degrees, on a similar system to that of the Universities. These can be arranged for at any place twice yearly by application to the nearest local honorary secretaries. There is no limit in regard to the age or sex of the candidate. The Royal Academy of Music is in Tenterden-street, Hanover-square. Admissions are given every term and half term, on the recommendation of a subscriber, associate, or member. A fee of twenty-one shillings is payable on application, which is returned on admission being granted. The fee for the entire course is thirty guineas a year, or ten guineas per term. Every branch of vocal and instrumental work is taught, but all are required to learn harmony and

the piano. Every student passes an examination on leaving, according to the result of which certificates are granted, and associateship or membership subsequently, according to distinction. There are a large number of prizes and scholarships of various value open to all students of either sex, awarded from time to time, according to results of examination in various subjects. The Tonic Sol-fa Institute, Forest-gate, conducts a system of training on the Sol-fa system, and is specially intended for teachers. The fees are £8 per term, and scholarships are to be won. In addition to these, there are in London many other important schools, the following may be specially mentioned :—The City School of Music ; the West Central College, Guildford-street, Russell-square, W.C.; the South London Institute of Music, Camberwell New-road ; the Crystal Palace School ; the College of Organists, 95, Great Russell-street, W.C.; and the Organ School and Instrumental College of Music, 3, Prince's-street, Cavandish-square. The Guildhall School of Music deserves extra notice. Its popularity has increased much of late years. As is generally known, it was established by the Corporation of the City of London, and candidates must be nominated by an Alderman or member of the Court of Common Councilmen. The fees are from £4 10s. to £33 per annum, according to the subjects taken. There are a good many scholarships and exhibitions. Numbers of those leaving the school get engagements immediately. In order to succeed in teaching, it is necessary to hold a good diploma. And we would strongly advise recourse to one of the Continental Conservatoires. At Stuttgart, the fees, in comparison to those of the English school, are low. For £14 a year one can get lessons three times a week upon piano, organ, or violin ; twice a week in harmony and class singing, and lectures on history and German literature. The fee for solo singing is a little higher. Three lessons a week are given, in addition to two piano lessons from a subordinate master, and harmony, declamation, and Italian classes. Pupils are not admitted for less than a year. There is an entrance examination which enables the masters to judge of the pupil's ability and to decide which professor he or she shall be sent to after the six months spent in the preparatory school. In this and other Continental towns, the young Englishmen live in rooms, and the young women in pensions. Board and lodging are very cheap. For about £4 a month very comfortable quarters can be had. At most of the boarding-houses are good pianos.

NATIONAL SCHOOL OF COOKERY.

We can strongly recommend the National School of Cookery. There are a number of imitation schools, but the original school at South Kensington is without doubt the best. A lady could receive a practical training in plain cooking in ten weeks, at a cost of eight pounds. A student is only allowed to enter on the following conditions :—She must agree to obey all the rules of the school as laid down by the Executive Committee. She may be discharged for any infraction of the rules at a day's notice, without any claim of any kind against the school. Providing that at the conclusion of her course she proves efficient, she must be prepared to accept a position on the teaching staff of the school at a salary ranging from one to two pounds weekly, but it is understood that the committee are not responsible for finding any paid employment while in the school or out of it, the employment of persons certified by the school resting entirely with the public. Teachers while on the staff and employed in the school are not free to take any engagement without leave from the Committee given in writing. Teachers holding diplomas, not on the staff, are free to make any engagement they may think fit, and may apply to the lady superintendent, who will give additional information as to their qualifications when required to do so. The complete course includes :—Scullery work and cleaning, the best methods for lighting a fire, the management of ranges, ovens, and patent fireplaces, the proper means for cleaning copper pots and pans, and enamelled ware. Practice in plain and high-class cooking, and in teaching both branches. A theoretical examination for a diploma is granted. Students training for teachers pass the first month as pupils in the scullery and demonstration class. This meets daily from 10 till 12 and from 2 till 4. During the second month, the pupil is employed in plain cookery practice, and in teaching that which she has learnt. Two months more are consumed before the pupil is thought to be perfect. Staff teachers receive £75 per annum and a meal daily, if employed in the Metropolis. When sent out of London, a sum of £52 per annum for board and lodging is granted. Second-class travelling expenses are paid Application for particulars should be addressed to the Secretary, National School of Cookery, South Kensington, S.W.

NAVAL CONSTRUCTORS (see Engineering Student-ships in Dockyards).

NAVY, THE.

As a way to earn a living, the Navy is certainly preferable to the Army. The sailor is more efficiently looked after than the soldier. He is more comfortably dressed, is better fed, and he is not cast adrift when useless. He can, after leaving the service become a coastguardman. The lowest rank in the Navy is that of "Boy," and we will work upwards. A boy who wishes to enter the Navy must be of good character. He must be strongly built and have attained the standard height and chest measurement. His physical condition should be such that he can undergo one of the strictest medical examinations by a doctor. A form is provided, which must be filled up, and which states that the lad has the permission of his father and mother in the important step he is taking. We should mention that these forms can always be obtained by addressing the Captain of the *St. Vincent* (training-ship), Portsmouth; *Impregnable* (training-ship), Devonport; the Captain of the *Ganges*, Falmouth; the *Boscawen* (training-ship), Portland; *Lion*, Devonport; *Nankin*, Pembroke; *Revenge*, Queenstown; the Captains of the Coastguard district ships at Bantry, Greenock, Harwich, Holyhead, Hull, Kingstown, Portland, Queensferry, Southampton, and from every Coastguard station. The commanders of the following drill-ships will also supply them:—The *Castor*, at North Shields; the *Clyde*, at Aberdeen; *Dædalus*, at Bristol; *Durham*, at Sunderland; *Eagle*, at Liverpool; *President*, West India Dock, London; *Trincomalee*, Southampton; and the *Unicorn*, at Dundee. In addition to these, there are Royal Marine recruiting stations at Birmingham, Bristol, Cambridge, Derby, Edinburgh, Exeter, Glasgow, Hull, Liverpool, Hemming's-row; St. Martin's-lane, London, W.C.; Salisbury, Sunderland, and Taunton. The statements of recruiting officers for the Navy are painfully inaccurate. Like their military brethren, they paint the life in very glowing colours. As soon as a boy is accepted by the medical officer, he is forwarded to a training-ship. His fare is paid, and, should it happen that there is no vacancy, he will be kept by the Admiralty until such time as an opening occurs. He is provided with a "kit," consisting of bedding, and one

cap and ribbons, two blue jerseys, two pairs duck trousers, two pairs serge trousers, one serge "jumper," two duck "jumpers," one serge frock, two flannels, three check shirts, one silk handkerchief. Duck is a white material. A "jumper" is a loose coat open in front and with a flap behind. His old clothes are returned to his parents. The standard of height and chest measurement are at present as follow :—

Age.	Height (in Socks).	Chest Measurement.
15 to 15½	5 ft. 0 in.	30 in.
15½ to 16	5 ft. 1 in.	30½ in.
16 to 16½	5 ft. 3½ in.	32½ in.

The pay of a boy on a training-ship is as follows (board, lodging, and education for work included) :—A second-class boy receives at the start 6d. per diem. When he becomes a first-class boy he gets 7d. a day. There is in addition an extra 1s. a month for good conduct. A first-class boy also gets an allowance of £2 10s. for clothing. It is calculated that after six months' service a second-class boy can send home 6s. monthly. A first-class boy should be able to forward 8s. The food is as follows :—There are three meals a day—breakfast, dinner, and supper. The breakfast allowance is twelve ounces of bread and four ounces of pork, three-quarters of an ounce each of cocoa and sugar. The dinner varies. On Monday and on Friday, twelve ounces of roast beef, and the same quantity of potatoes ; on Tuesday, "sea pie" is the regulation dish, and it is also served up on Saturday. "Sea pie" is most excellent eating. The writer once visited a training-ship on "sea pie" day, and can testify to its excellent qualities. The Wednesday dinner allowance consists of twenty-eight ounces—twelve of pork, twelve of potatoes, and four of split peas for soup. On Thursday and Sunday this quantity is exceeded, thirty-five ounces being allowed. The meal on these days is roast mutton, potatoes and plum-pudding. For supper the young sailor is allowed tea and bread and treacle. When ill, the invalid is excessively well fed. The life on board is on the whole a happy one. Amusements and holidays are not forgotten. On each ship there is a band. Any boy who is fond of music can be trained for a Naval Bandsman. Each vessel has a good library, and bagatelle, dominoes and chess are encouraged. The recreation ground is on shore ; the training-ships are

always moored close to land, and cricket, football, skittles, quoits, and other games can be indulged in. Entertainments are also given on board ship. During the winter there are magic lantern lectures twice a week. Boys who can row can enter for local regattas, where prizes are almost always given for training-ship lads. The holidays, seven weeks a year, and, in addition, two and sometimes three, half-holidays in a week. Three weeks at Christmas, and at Easter and in September, sixteen days are allowed. Cheap railway tickets are provided for those who have distances to go. The work consists of sail-making, signalling, tailoring, swimming, gunnery, and gymnastics; reading, writing, arithmetic, geography, and spelling form the usual curriculum. A well advanced boy can at 18 become an ordinary seaman. He will then be drafted to a man-of-war, and receives £22 16s. 3d. a year wages. His first rise will be to A. B. (able-bodied seaman). An A. B. receives from 1s. 7d. to 1s. 9d. a day, representing £27 17s. 11d. and £31 18s. 9d. per annum. Extra pay is granted for various qualifications. Thus, a good conduct badge is worth a penny a day extra, and three badges can be gained. For special gunnery and torpedo knowledge, as much as 1s. 5d. a day extra is granted. A. B.'s rise to leading seamen, whose maximum salary is £34 19s. 7d. per annum. After a considerable period of service in this capacity, a rise to the position of "petty" officer of the second class is possible, when £39 10s. 10d. a year will be gained. A petty officer of the first class receives £47 2s. 11d., and a chief petty officer £60 16s. 8d. Thence he can be promoted to the position of warrant officer, with £150 11s. 3d. a year, and to chief gunner with £164 5s. After the completion of eight years of service at sea, it is possible to become a Coastguard. Coastguards are not so well paid as men in the Navy; but they have a good house, and the chance of a pension. There is plenty of opportunity of rise in the Navy, if the young sailor be diligent. The following list of superior vacancies will give some notion of what can be done by a man of average good conduct and intelligence. There are 1,100 leading seamen, 1,150 second-class officers, 2,500 first-class officers, 300 chief officers, 700 chief gunners, chief boatswains and warrant officers. In the Coastguard service there are nearly 1,500 boatmen, 1,300 commissioned boatmen, 300 chief boatmen, 200 officers, and 200 boatmen in

charge. When on leave sailors of all ranks receive their pay. After twenty-two years of service at sea it is possible to retire with a pension of between £20 and £30. Well-conducted men receive in addition a present of £20. Petty and warrant officers receive as pension between £120 and £150 per annum. Many of the lower branches of the Civil Service are open to retired sailors, and, in particular, positions in Dockyards.

NEEDLEWOMEN.

Needlewomen who go out by the day receive from 3s. to 5s. for from seven to nine hours' work. The best way to obtain occupation of this kind is to advertise in local papers. Gentlewomen who are able to undertake dressmaking, and who are willing to go out in the capacity of needlewomen, can frequently obtain employment by applying to Miss Younghusband, Bently-villa, Richmond-road, Ealing, W.

NURSES.

Domestic nurses are dealt with under the head of Household Servants. (See also Hospital Nurses.)

NURSES OF THE SICK POOR.

Ladies, "by birth and education," who desire to become nurses of the sick poor in their own homes, can, after a year's training at a hospital, obtain employment at a remuneration commencing at £35 per annum, board, lodging, and uniform included, rising to £50. At the Central Home, 23, Bloomsbury-square, W.C., the Superintendent will give all information. The work is even more arduous than hospital nursing, and a wise method of selection is employed by which candidates have an opportunity of testing their inclination for the work.

OCULISTS (see Medicine).

ORDNANCE ARTIFICERS CORPS (see Army).

PAINTING.

Art classes and art schools have recently been opened in almost every town. Should a boy or girl exhibit marked talent, it

would be well to consult the head of one of these schools as to the best methods of training to be adopted. Unlike music or the professions, it is impossible to lay down any set course for the education of a young artist. So much can be learned by the lad himself; and many of the leading men in the art world to-day have educated themselves entirely without expense to their parents. The fees at art schools and classes vary from as little as one guinea for a course to as much as 20 guineas. It is no longer customary to apprentice lads to artists. The remuneration of artists depends entirely upon their skill and tact.

PAINTING ON LEATHER.

Those who are well educated in the styles and technique of artistic upholstery can earn fair wages at leather painting. The work has lately become popular with women, who are rapidly superseding men. Application to any leading upholsterer will probably result in the receipt of a trial order. The work is paid by piece, and some ladies are said to be able to earn from £3 to £4 weekly.

PAPER BAG AND BOX MAKERS.

This work, which formerly gave employment to a very great number of young women, is now done almost entirely by machinery. The wages are exceedingly low. Some of it is given out, and can be taken home, and, as it is light work, it is frequently done by girls in delicate health. Applications should be made to a printer who undertakes the work, or to a cardboard box manufacturer.

PAPER MAKERS.

In the paper-making districts of England and Scotland employment can usually be readily obtained. It is not usual now to apprentice lads to the work, as machinery has done away with hand labour to a great extent. As paper mills are usually situated at a distance from towns, those who are, for medical or other reasons, in need of continual country air should consider whether or not the vocation is suitable for them. Skilled workmen receive from £1 to 30s. per week. There are many grades from which the unskilled labourer can work up.

PHOTOGRAPHY.

Photographers receive premium pupils and apprentices. Apprentices are usually bound for four years, with from £30 to £100 premium. Pupils are taken by leading photographers in large towns on payment of premiums of from 50 to 200 guineas. Many skilled amateurs have become professional photographers without any intermediate training. As a business, photography is not particularly remunerative. It is also exceedingly crowded. The photographic papers advertise vacancies, and will receive advertisements of those requiring positions or pupilships. The capital required for starting as a photographer in a small way is £50 or £60. In America photography has recently become a popular occupation for women. In England there are now a number of ladies employed in the business. The retouching of the negatives, mounting on cards, and other light work, is eminently suitable for them. Female assistants receive from 10s. to 25s. a week; male, from 15s. to £2.

PIANOFORTE TUNING.

Whilst warning readers against the highly-coloured statements of the numerous advertising touts who profess to teach pianoforte tuning, we would suggest that in many country districts there is ample scope for anyone requiring partial employment in the tuning of local instruments. The qualifications are a good "ear" and delicate touch. Women often make good tuners. Most pianoforte makers or agents will teach tuning for one or two guineas. The instruments cost 2s. only. The remuneration is from 3s. 6d. to 5s. per piano, or from half a guinea to a guinea per annum.

PLAN TRACING.

Draughtsmen in the offices of architects and surveyors earn from £1 to £2 per week. The work is only to be learnt by practice, though anyone with a taste for mechanical drawing could speedily master the art. Lady tracers are now not uncommon; in fact, an office has been opened known as the Lady's Plan Tracing Office, 8, Great Queen-street, Westminster.

POLICE, THE.

In order to enter the Police Force, the primary qualification is a good character. In most provincial towns, the police are chosen from men who have been under the eye of the chief inspector for a number of years. In most towns the minimum standard of height is 5 ft. 8 in. A medical examination somewhat similar to that undergone by recruits is stipulated. The other qualifications are simple reading, writing, and arithmetic, with special regard to spelling. If the candidate is accepted, he spends a period of time on probation, and then makes a declaration that he will serve our Sovereign Lady the Queen loyally and dutifully. The Metropolitan Police Force pay commences at 24s. a week, with an increment every two years until 30s. has been reached. The "Reserves," whose duty it is to fill up vacancies in case of illness, &c., are paid on a slightly higher scale. It is possible to rise to the rank of sergeant in eight years, though few achieve this distinction under ten. Sergeants receive from 34s. to 38s. a week. Sergeants of the Reserve are better paid, as are those who do duty of a responsible kind. Sergeants rise in five years to superintendent. Superintendents receive from £2 14s. to £3 a week. The uniform is provided, and consists of two pairs of boots, a tunic, a helmet, and two pairs of trousers each year, and an overcoat every three years. The rules of the force are very severe with regard to breaches of discipline. On the completion of twenty-eight years' service the constable can retire and receive a pension equal to two-thirds of his salary. Detectives are a distinct class of the service, having their headquarters at Scotland Yard, S.W. They are selected from the police, and are chosen for their intelligence, aptitude for tracking criminals, superior education, and knowledge of foreign languages. They receive salaries in accordance with their talents. On reaching the rank of superintendent the officer of the police undergoes an examination at the hands of the Civil Service Commissioners. Applications for admittance to the Metropolitan Police should be addressed to the local station. In provincial forces applications should be sent to the head constable of the district.

POST OFFICE CORPS (see Army).

POULTRY-KEEPING.

"Does poultry-keeping pay?" is a question often asked of every person who keeps a hen or two. We should not like to answer so momentous a question. Among those whom we questioned on this matter we found opinions differ. A well-known work states that Miss Stuart, the daughter of Professor Stuart, says: "I make cent. per cent. upon eggs. An old summer-house makes an excellent fowl-house, and half an acre of meadow or rough land will keep about 80 fowls. This number should be divided into two families, as poultry kept together in large numbers never do well. The work is healthy, pleasant, and interesting, and by constant care and attention may be made profitable. Twenty-four fowls are enough to commence with. To ensure a good supply of eggs during the winter months, such fowls should be secured as have been hatched in the previous March, or at least early in April. Hens, properly housed, fed, and of certain ages and breeds, lay on an average about 120 eggs each year. Spanish fowls lay the largest eggs. Cochins are good winter layers, and suit small runs, better perhaps than any other breed. Hamburgs are the most prolific, laying from 150 to 200 eggs per annum. New-laid eggs will always fetch a good price. In summer, 1½d.; and in winter 2d. and even 3d. can be secured for them. A good way of selling them is to leave them with a greengrocer or baker to sell on commission. Another way is to contract with a high-class boarding house or hotel. The best thing to pack new-laid eggs in is damp bran. Turkey breeding is a most profitable undertaking. A turkey will half feed itself, if one has a field of one's own; but it is useless to try and keep them in a yard or grass run. A great deal may be done by fattening them for the London market. If sufficient are reared, a contract should be entered into with the best gamedealers or poulterers in large towns." This certainly appears to us to be a sanguine view, but we give it as we find it.

PRINTING.

In order to become a printer it is usual to enter into an apprenticeship with a master printer. The premium is from £10 to £30. The wages commence in the country at 5s., and in London at 7s., and rise from 10s. to 15s. When a lad is out of his time, he can make 36s. a week, and many

printers earn as much as £2 10s. to £3 a week. Compositors should be, though they frequently are not, fairly well educated. No man has so good a chance of rising in life as the ordinary compositor. At least four out of ten editors have risen from the "case." In the machinery department of a printing establishment—the machine-room as it is usually called—are employed a number of pressmen and machine-men. These receive from 20s. to 35s. a week. "Laying-on and taking-off" boys receive from 5s. 6d. to 8s. 6d. a week. A number of other employés work in printing offices, and their qualifications and wages will be found under their respective heads. Female compositors are taken in a few houses, and there is a principal establishment "run" by the fair sex entirely. This is Miss Faithfull's Victoria Press at Praed-street, Paddington. At the Women's Printing Society, Limited, 216, Great College-street, Westminster, there are a number of women employed in type-setting and other branches of printing. It also thoroughly instructs women. There is a modest premium of £2, which is returned as wages. Messrs. Bale, 87, Great Titchfield-street, take women as apprentices.

PRISONS, CLERKS IN.

Candidates must be nominated by the Home Secretary, and must be over 20 and under 30. The examination consists of copying manuscripts, book-keeping and digesting returns and summaries, indexing, arithmetic, up to and including vulgar and decimal fractions, and dictation. The examination fee is £3. Salaries commence at £80, and rise to £130 per annum, with an ultimate maximum of £190. Apply to Civil Service Commissioners, S.W.

PRISONS, SCHOOLMASTERS IN.

Candidates must be nominated by the Home Secretary. The limits of age are over 25 and under 40. The examination consists of handwriting and orthography, grammar, arithmetic, reading, history, geography, school management, and several optional subjects. Second-class schoolmasters commence at £80, and rise by annual increments of £5 to £125. First-class schoolmasters commence at £130, and rise by £5 to £160. Schoolmistresses commence at £60, and rise to £85.

PRISONS, WARDERS, &c., IN.

Full particulars of employment in the following capacities in prisons can be obtained on application at any local jail. Warders, matrons, watchmen, gate-keepers, compounders, messengers, stewards, porters, nurses, guard sergeants, and privates of the guard. The qualifications are good testimonials, physical strength, and good health. A list is kept at every prison, and vacancies are filled from this list. A period of probationship is undergone. The wages are as follow :—Compounders, £83 to £103; guard privates, £60 to £65; sergeants of guard, £70 to £80; stewards and porters, £65 to £75; messengers, £70 to £80; gate-keepers, £88 to £108; watchmen, £65 to £75; nurses, £55 to £70; infirmary nurses, £65 to £75; assistant matrons, £50 to £65; matrons, £55 to £70; principal matrons, £70 to £85; chief matrons, £95 to £145; and chief warders, £165 to £215. Governors must be within the ages of 25 and 41, and must be nominated by the Home Secretary. Military men who have retired usually are selected for these positions. Salaries are from £350 to £1,000.

PRODUCE BROKERS.

Under this head are included the following :—Speculators in bones and horns, chemicals, coffee, colonial produce, cork, cotton, drugs, fruit, guano, hides, indiarubber, indigo, ivory, leather, machinery, metals, rice, ships, sugar, tea, timber, tobacco, wines, spirits, and wool. There are numbers of little markets connected with these, and a prominent broker informs us that altogether there are some fifty kinds of brokers. The establishment of a new clearing-house will materially alter the nature of the work to be performed. In order to succeed we are informed that no opportunity of making acquaintance with the markets should be missed; none but those possessed of thorough business qualifications and power to apply them should think of embarking in an undertaking in which so much shrewdness and sagacity are required. But if the labour is great and the qualifications unique, the advantages are considerable. The merchant princes are the pride of our country. To get on as a paid clerk in a produce broker's office, a man should have friends in the city, through whose influence he can obtain a situation

with some broker. Besides knowing how to do the work of a clerk, he should be possessed of good personal appearance, self-reliance, and conscientiousness. The salary would not exceed £40 per annum at first. By industry and perseverance it is possible to rise to £300. He may also have opportunities of enlarging his employer's business. Such assiduity usually meets with its proper reward. A clerk who makes himself a power in any concern may be taken into partnership, even though he have no capital. Some of the principals may be getting old and wish to retire, and are not sorry to relinquish their work to a really reliable man to whom they offer good terms, they themselves becoming sleeping partners. In such cases the quondam clerk ceases to receive salary, and takes a share in the business, and works on these terms until he amasses sufficient capital to be paid on that also.

PROOF-READERS.

The work of a proof-reader is arduous and not particularly interesting. He is employed in correcting the first impressions of newspaper articles, of books, &c. A good proof-reader should almost be a practical printer, as he will then be able to save his employer a good deal of expense, which he would not probably have been able to avoid had he not graduated from the "case." In addition, accuracy, quickness of eye, a good knowledge of orthography and punctuation are necessary. A slight knowledge of quotations in most languages is an advantage, and a good stock of information respecting history, art, and science, are necessary for a proof-reader. By many proof-reading is considered the best situation in a printing office. In a small office the work is done by an overseer. The remuneration of a proof-reader is generally about £2 2s. per week, and overtime. In large offices the salary varies from £3 3s. to £4 4s. The occupation is fatiguing from the constant mental exertion required. Female proof-readers are now numerous, and they receive from 30s. to 35s. per week.

RAILWAYS (Employment on).

Railways offer a vast field of employment of every description. A list of the various classes of employés would in itself occupy considerable space. Beginning with the most

numerous class (porters), we may say that they are divided into two classes, goods and passenger. The duties of the former are loading and unloading merchandise, and other like duties, and of the latter to attend to passengers' luggage. At various seasons of the year each department is severely tried by press of work. On most railways porters are nominated by leading officials of the line, but it is possible by application at a neighbouring station to get taken on without this qualification. The wages to commence with are from 15s. to 16s. 6d., rising slowly to 18s. or £1, uniform included. Porters receive a good deal of extra remuneration in the shape of "tips" from passengers. These vary from 5s. to 8s. a week on the average, though, as in most avocations, much depends upon the tact and industry of the man himself. We were informed by a guard of experience that he knew a porter on one of the northern lines who made as much as 15s. to 18s. a week during the summer time. Formerly tips were heavier than of late years. GUARDS are in the majority of cases selected from porters. The guard serves a probationary period, before taking charge of a train. He is responsible for lamps, coupling, brakes, and the general order of the train. During the journey he superintends the stopping and starting of the train. He makes entries as to its running, and keeps an exact record of the time of each stoppage. Goods guards have to make up their trains, and the composition of a heavy luggage train is not at all an easy matter. It is dangerous and wearisome. We will take a day of a guard's life for example, and we may here mention that much interesting information on this subject may be gained from a shilling work entitled "All about our Railways." The guard of a London and North-Western through train may leave Euston for Liverpool in charge of the 9 a.m. express which arrives at a quarter to three. He will start from Liverpool on the return journey by the 4 p.m. train, arriving at Euston at 9.15 p.m. The next day the same guard may take charge of the train leaving Euston at noon, which, dividing at Shrewsbury, does not arrive at Liverpool till 6.15. He will not then return to London, but will stop at Liverpool for the night. By this arrangement his hours will be eleven on Monday and six and a quarter on Tuesday, so that, taking the average of both days, he has less than eight and half hours per diem. But to this must be added the time before starting and after the arrival of the

train, during which time the guard has to be at his post. Their pay is at first, as assistants, 21s. and rises to 30s. The highest pay is realised by the men on some of the important express trains: those for instance who are in charge of the Irish Mail, the Scotch express, and the "Flying Dutchman." Guards whose duties compel them to sleep away from home are allowed extra pay for expenses. Engine drivers receive from 5s. 5d. per diem. to 7s. 6d. Life on the foot plate is of the most arduous nature. It is necessary to graduate from the post of engine cleaner. Thence the aspirant may be promoted to the position of fireman upon a shunter, where he will get his first experiences of driving, and will learn to understand the mechanism and the meaning of the numerous signals. He will then, if he is industrious, be promoted to the platform of a goods engine, and by shunting at different places for the passenger trains, he learns the road and its working. His pay will be about 3s. 6d. per diem. He will be required to serve for at least four or five years in this capacity. He may, if he is lucky, be moved on to a passenger engine, where he will be better paid, and will not work for such long hours. "Firing" an engine is a most difficult business, and on the coal-saving lines a good deal of money can be made by a careful fireman. Firemen are usually kept at their work for five or more years before they are permitted to take charge of an engine. The chief qualification for the post of driver is good sight. Periodical examinations are held to test them. The examination is of the most stringent nature. Drivers and firemen are at work at least an hour before the starting of their engines. Promotion of drivers depends mainly upon seniority and their "record."

RAILWAY CLERKS.

There are said to be 25,000 railway clerks, and of these a small but increasing proportion are of the fair sex. (See Commercial Clerks, Female.) Candidates must be nominated by directors or leading officials. The salaries of juniors commence at from £25 to £30 per annum, and rise to £50. Seniors get about £60. Thence their rise is a slow one, but comparatively sure, and instances are on record where men have risen from the lowest to the highest positions on our lines. Booking clerks receive from £25 to £30 per annum

to commence with. In busy stations their work is exceedingly trying, and of a varied nature. In the provinces they often rise to be station-masters, when they receive from £80 to £122 with a house and other extras.

READERS.

By watching the advertisements in *The Athenæum* young men and women who are able to read aloud well and clearly can often get a couple of hours' work a day. Numbers of Members of Parliament engage readers. Literary men and women occasionally require them. The remuneration is entirely a matter of arrangement, but from one shilling to eighteenpence an hour is usual.

RENT COLLECTING.

This is not interesting work; and, curiously enough, it is being done to a considerable extent by women. We are not able to ascertain the remuneration of female collectors; but men are usually paid by poundage, or by a salary and commission. Much depends upon the size of the estate. The collector's honesty is usually guaranteed by one of the associations which insure the fidelity of employés. The agent of the Marquis of Northampton states that the middleman employed hitherto to collect the rents upon his London property had turned out so badly that it was his lordship's intention in future, as rents fall due, to collect them directly through a lady visitor. In the course of an examination before the Royal Commission on the Housing of the Working Classes, Lord William Compton expressed his opinion that it was practically impossible for the ground landlord to see that the condition of his leases are kept, except by such active supervision as is exercised by Miss Octavia Hill.

REPORTING.

(See Literary Work.) A thorough knowledge of shorthand is requisite. This can be obtained at any of the numerous schools established in our large towns.

ROYAL IRISH CONSTABULARY CADETSHIPS.

Candidates must be nominated by the Lord-Lieutenant of Ireland, and the nomination can generally be secured by the

influence of a Member of Parliament. The examinations are held at irregular periods, and are of a severe nature. Many of the candidates are graduates in honours of Oxford, Cambridge, and Dublin. In social standing the Royal Irish Constabulary ranks with the army. The limits of age are between the ages of 21 and 26. Minimum height 5 ft. 5 in. Physical strength must be good. The examinations are held in Dublin, and the fee is £2. The subjects are as follow:—Arithmetic, including "tots" (see Civil Service) orthography, handwriting, dictation, Latin or French, English composition, geography, précis writing, British history, and the elementary principles of law. The competition varies from three candidates to eight for each vacant position. The successful candidates are trained at the depôt at Phœnix Park. They must either be possessed of a private income of £50 per annum, or must find some person who will be answerable to the Commandant for that amount until promotion to the rank of District Inspector. The cadets are only on probation, and are not considered to have any claim to be permanently attached to the force till they attain the rank of district inspector. Their promotion, as vacancies offer, to this rank, is regulated by their standing, proficiency, and conduct. The present rates of pay in the ordinary course of promotion are:—Third-class district inspector, £125 to £137; second-class ditto, £165 to £177; first-class ditto, £226 to £255; county inspectors, £300 to £400. The rates are exclusive of the valuable allowances attached to each class. But officers of ability need not confine their hopes to this scale; they are eligible for the lucrative staff appointments at head quarters, resident magistrates, &c.

SECRETARYSHIPS.

Secretaries of members of Parliament are well paid. The qualifications are usually a first-class education, punctual and precise habits, a good appearance and address, a knowledge of shorthand, and sufficient acquaintance with book-keeping to keep a table of personal expenditure. As the post is a confidential one, the exercise of much tact and discrimination is necessary. The salaries vary between £100 and £400 per annum. Such positions are obtained in the majority of instances by personal influence, but in some

cases advertisements of vacancies appear in *The Times*. Secretaries of companies must write well, be acquainted with the working of limited companies, and understand general office work. They receive from £150 to £1,000 per annum, and are almost invariably appointed through personal interest. Secretaryships to institutions are held usually by clergymen or retired military men. These positions are much coveted, and in a recent instance 967 applications were received in reply to a single advertisement in *The Times*. Secretaries of clubs are frequently members of distinguished families. Such positions fall only to the fortunate. The remuneration is from £400 to £1,500 per annum, including apartments and board.

SHIPBUILDING.

An important trade, especially dependent on finished metals, is that of shipbuilding. The principal seats of the trade are the Thames, Tyne, Wear, Clyde, and Mersey. Shipbuilding is a trade of specialities: one firm being celebrated for its war-ships, another for its mercantile marine, a third for yachts, &c. It contains a large number of what have been termed subsidiary occupations, which are paid according to the following rate of wages:—Blacksmiths, 30s.; angle-iron smiths, 27s.; hammermen, 16s. 6d.; riveters, 27s.; platers and fitters, 32s.; caulkers, 27s.; labourers, 16s.; rivet boys, 17s. 6d.; boat-builders, 32s.; joiners, 32s.; block-makers, 29s.; painters, 31s.; riggers, 24s.; machinists, 23s. 6d.; borers, 16s.; helper, 16s. Applications for work should be made to the foreman of a shipbuilding yard. In the construction of iron ships platers and riveters are employed. London workmen are paid higher wages than those of any other portion of the kingdom.

SHOPKEEPING.

Under this head we include such trades as are not dealt with elsewhere in "A Thousand Ways to Earn a Living." There are three ways of becoming a shopkeeper. The most general is that in which an apprentice serves his time, and eventually either acquires by purchase or ability a share in his master's business. In the second, a person having become skilled in a particular trade purchases a business or

starts one of his own. Nowadays the system of apprenticeship has slightly decreased in popularity. Young men prefer to be called assistants. To-day an assistant of two or three years' standing commonly opens a shop with no other knowledge than that gained during the period of his service. The third and most risky system is the purchase plan, by which an "outsider" buys up an established concern and places a manager in possession. When this principle is adopted the most careful supervision is necessary. Every three months the books should be audited by an independent accountant; in some trades monthly audits are not unusual. In starting a shop it is necessary to give much time and consideration to the following leading points. One of the most important questions is that of *position*. Many a good shop has proved a failure from the fact that it is on what is known as the wrong side of the street. In almost every town, one side of any street attracts more custom than another. We believe that this particular point is of more importance than any other except that of opposition. In large cities opposition is not so much to be feared as in small towns and villages. In a town of ten thousand inhabitants it will generally be found that every trade is well represented, so that unless one has superabundant capital it is better to purchase an established business than to start a new one. In large towns "two of a trade" often open side by side without much disadvantage. In London it is easy to point to numberless instances of this sort. In certain trades corner shops are preferred. Chemists, Publicans, Bakers, and Drapers, consider corner positions very advantageous, though, as a rule, it is only in trades where a large amount of window display is a requirement that the extra rent should be paid. Again, it is well known that shops in certain streets never thrive, even though surrounded by a teeming population. Location is, therefore, as important as position, and while one of our modern mammoth tradesmen, with a reputation extending over a radius of a hundred miles, might safely open where he likes, a struggler could not, with impunity, start in a street or district in which failure or feebleness is general. Connection, though not so important a matter as it used to be, is still of value. A pushing man who begins with a fairly strong "goodwill" can often very quickly work up a thriving trade: whereas had he started without any nucleus at all he would have found his

task of greater difficulty. It is always well to have a nucleus of some sort, and the best kind is a personal acquaintance with the people in the neighbourhood. Thus it is that a popular assistant can often start in business and gradually draw away the bulk of an unpopular tradesman's custom. In purchasing the goodwill of a business, judgment must be brought to bear. Statements made by the proprietor or the transfer agents should be received with caution. The one is naturally desirous of getting as much as he can, and the other wishes to increase his commission. In the selling of businesses, commercial morality seems to be almost entirely suspended. With the exception of well-known and reputable firms, the agents who transfer shops are often thoroughly dishonest. The amount of *capital* necessary is a matter upon which it is almost impossible to advise without knowing the surroundings and particulars of individual cases. But never start unless you have got enough "to hold on with" for at least eighteen months. And, if violent opposition is to be expected, keep as much in reserve as possible. It is the fact, we fear, that many businesses are now started without capital at all. Young hopeful thinks he will be able to do all right with his modest savings and the credit that he can almost inevitably command. In about two per cent. of businesses started in this manner, the sanguine struggler manages to scrape through. In the remaining instances he finds his way to the bankruptcy court, there to be made miserable for life, perhaps; or, if he is lucky, he is helped out of the business by friends, and becomes an assistant once more. Some trades naturally require much more capital for the business done than others. Cash trades are "quick" and credit "slow." The cash system is fortunately becoming very general. In the choice of assistants it is best to start with a brother or near relative. The first assistant should be one in whom implicit confidence can be placed.

It is almost impossible to deal with each trade individually inasmuch as local custom affects every kind of business. The remarks above refer to Bakers and Confectioners, Butchers, Poulterers, Cheesemongers, Grocers, Greengrocers, Publicans, Booksellers, Newsagents, Clothiers, Hatters, Milliners, Drapers, Coffee Tavern Keepers, Jewellers, Fishmongers, Tobacconists, Seedsmen, Boot Makers, China and Glass Dealers, Cutlers, Hosiers, Upholsterers, Hotel Keepers, Fancy Repositories, Coal Merchants,

Florists, and Stationers. Trades not included in this list are of such a special kind as renders unnecessary the publication of any information respecting them. Before concluding any arrangement as to the transfer of a business, read our warnings which will be found facing page 1 of this book.

SIGN-PAINTERS.

Sign-painters and sign-writers earn excellent wages, if clever. A three years' apprenticeship is usual, and more especially in the writing. There are numbers of sign-painters of ability making periodical trips round the country, who earn as much as £6 a week; there are others who barely manage to exist. But, unfortunately, this is what is known as a summer trade, and is very slack in winter.

SORTERS (Female).

These are employed in clerical duties in post-offices and savings-banks. The subjects are:—Arithmetic (200), handwriting (100), spelling (100), reading and copying manuscript (100), and geography (150). The preliminary is the easier of the two, yet it generally weeds out a number of the candidates. The fee is 1s., and the limits of age are between 15 and 18. They must be unmarried or widows, though we would point out to the Commissioners that it is not very possible that any of the competitors could be of the latter class. The salary is 12s. per week at first, with an annual rise of 1s. per week to £1. Address, Civil Service Commissioners, S.W.

STOCK EXCHANGE, THE.

This is the resource of a vast and ever-increasing body of young men. The majority are sons of well-to-do city men. One of the rules of the Stock Exchange is that no man can be admitted unless introduced by a member, who gives good security for his behaviour. It is rarely that a man sets up on his own account as a stockbroker. After the preliminary experience in the office of another broker, he adds his capital and connection to the business of some existing firm, and thus extends the business. Salaried clerks receive the same remuneration as in other broker's offices; it is rarely that a clerk in a stockbroker's becomes a partner. He must

possess unusual qualities to gain the entire confidence of the principals of his firm. Besides members of the Stock Exchange, there are business men known as dealers or stock-jobbers, who buy and sell entirely upon their own speculation. But little capital is necessary for the start; one judicious speculation will make a man. Judgment and tact are necessary to operate successfully. Much money is made by outrageous "Bearing," and stock-jobbing is a field in which as much may be lawfully gained as by any other means.

SURGEONS (see Medicine).

SURGEONS ON PASSENGER SHIPS.

This is a method of making money often adopted by young men who have not means to establish themselves in practice, and who do not care to go as assistants. The ages are generally between 22 and 40. Satisfactory testimonials and proof of registration are necessary. These should be forwarded by the applicant to the firm of shipowners with whom he proposes to negotiate. The rate of remuneration is as follows :—£120 to commence; after three years' service, £150. After employed upon Her Majesty's transports the pay is doubled. Surgeons are required by the Government Emigration Board. They are paid at the rate of so much per head, payment being based upon the number of emigrants who land alive. For the first voyage the surgeon get 10s. per head, and for the eleventh and subsequent 20s. To the Cape the payment commences at 7s. per head. When there are more than 400 passengers on a ship, or where two surgeons are appointed, the payment is fixed by the Emigragration Board as a gross sum, and not at the usual rate. In all cases the payment is contingent on the good conduct of the surgeon, and on the Colonial Government being satisfied that he has discharged his duties efficiently. If a surgeon returns to England direct, he is allowed £60 towards his passage. But if he returns by way of India and China, and be placed in charge of Government emigrants from thence to the British West Indies, the allowance towards his back passage to England is £30.

TEACHING.

This is dealt with under its divisional heads.

TELEGRAPH LEARNERSHIPS.

There are two examinations open to both sexes for telegraph learnerships. The subjects are orthography (300), arithmetic (300), geography (200), and handwriting (200). The limits of age are over 15 and under 18. The salary commences at 10s. or 12s. a week, and rises to 16s. The maximum is £65 a year. The most difficult subjects are dictation and copying. Apply to the Civil Service Commissioners, S.W.

TELEPHONE SERVICE.

Information respecting this will be found under the head of Electrical Engineering. The various telephone companies employ beginners, or "improvers," at small wages, generally commencing from 7s. 6d. to 12s. 6d. a week. The improver should spend all his spare time in gaining a complete mastery of theoretical electricity.

TOBACCO STRIPPERS AND SORTERS.

In cities where the manufacture of tobacco is carried on to any extent, women can often get a good wage by tobacco stripping and sorting. Cigarette-making is also profitable and light work, though it requires a training of from 5 to 7 years. Many women earn as much as 25s. a week by stripping and by cigarette-making.

TRANSLATING.

Ladies with a good knowledge of French, German, or Italian can often get work from publishers. The pay is very low, and numbers of firms offer £10 for the translation of a whole novel.

TYPE-WRITING.

This is undoubtedly one of the most promising occupations for women of which we are able to speak. The type-writer, we may mention for the benefit of those who may not have had the opportunity of seeing it in work, is a small machine for the rapid writing of letters or other documents operated by a keyboard. In the United States there are between sixty and seventy thousand type-writers. In London the machines are being brought into use in all kinds of offices,

and there can be little doubt but that they will speedily become universal. Authors dictate their books to type-writers, legal papers are copied by them, and business correspondence of every description transacted with them. It is an employment particularly well suited to well-educated girls. To acquire a really useful knowledge of type-writing would take from six to eight months. The largest school in London is that of Madame Monchablon, 26, Austin Friars, E.C., who charges two guineas until perfect. The machine usually adopted is the No. 2 "Standard" Remington. In about six months a speed of 50 words a minute is attained, and this can be increased to 80, and in phenominal cases to 100. We are informed on the best authority that appointments can always be obtained for skilled operators.

UNDERWRITERS.

"Lloyd's" is somewhat difficult to enter. One must be introduced by a member, and it follows naturally therefore that the members are mostly connected by family or friends. Sureties to a large amount are required. Underwriters, in "Lloyd's," or out of it, should possess a personal acquaintance with shipowners.

WAITRESSES.

Waitresses in cafés and restaurants receive from 5s. to 15s. a week. The qualifications are neatness and good appearance generally, ability to perform ordinary waiting, and good testimonials. Applications should be addressed to the secretaries of various cafés, companies, or to restaurateurs. The Society for Promoting the Employment of Women, 22, Berners-street, W.C., will place upon its books the names of those willing to wait at evening parties. The remuneration is 5s. for the evening.

WATCH AND CLOCK MAKING.

In the three watch-making centres of England—Clerkenwell, Prescott and Coventry, and Lancashire—nearly one-half the population is employed in the manufacture of watches and clocks. When the Clockmakers' Company was incorporated in 1632, the City of London was the centre of the trade in England; but, with the subdivision of labour induced by the demand for English timekeepers, Clerkenwell became

the headquarters of artificers in the various branches, and maintained pre-eminence in every branch of watch-making, as long as verge watches held the field. Improvements supervened, and the move-making trade migrated to Lancashire. At Coventry movements are also made. Owing to the very strong competition of France, Switzerland, and latterly of the United States, the industry is now very much depressed. Work can generally be obtained in the following branches :—Makers, engravers, examiners, gilders, jewellers, jobbers, balance-makers, barrel-makers, barrel ratchet-makers, bolt-makers, compensation-makers, case enamellers, case joint finishers, escapement-makers, lock-makers, file-makers, frame-makers, fusee-makers, chain and hook-makers, glass-makers, hand-makers, jewel-makers, jewel-hole-makers, cap-makers, cock-makers, dial-finishers, index-makers, key-makers, lever-makers, mainspring-makers, material-dealers, movement-makers, pallet-makers, pendant-makers, pillar-makers, pinion-makers, roller and lever-makers, secret-springers, tool-makers, verge-makers, wheel-cutters, and oil-merchants. It has been said that watch-making is an occupation which will speedily leave this country. A gallant struggle is now waging—the English manufacturers contending with the foreigners for their own and the colonial markets. It is to be feared that we shall come off second-best. Watch repairing is learnt by apprenticeship to a jeweller. The premium varies from £30 to £50, according to the position of the firm. The apprenticeship extends over five years.

WHERE LADIES CAN SELL THEIR WORK.

The following is a list of the societies and depôts for the sale of ladies' work :—

Brighton, Hove, and Sussex Gentlewomen's Aid Society, 55, Waterloo-street, Brighton.

Depôt for the Sale of Ladies' Work, 16, King-street, Manchester. The annual subscription is 5s. Commission, 1d. in the 1s.

Ladies' Industrial Society, 11, Porchester-street, Connaught-square.

Ladies' Work Society, 31, Sloane-street, S.W.

Gentlewomen's Self-Help Inst., 15, Baker-street, W.

Cheltenham Fine Art Society, Beaumont, Cheltenham.

Depôt for Sale of Work by Ladies of Limited Means, 2, Portland-street, Clifton.
Polytechnic Institute, Regent-street, London.
Ladies' Work Society, 83, Bold-street, Liverpool.
Gentlewomen's Home-Work Association, St. Mark's Vicarage, Surbiton.
Wemyss Needlework School, East Wemyss, N.B.
Ladies' Work Society, 207, Lord-street, Southport.
Society for Sale of Work of Ladies of Limited Means, 3, Edgar-buildings, Bath ; and 66, Castle-street, Reading.
Irish Ladies' Work Society, 48, George-street, Kingstown.
Royal Edinburgh Repository for Sale of Gentlewomen's Work, Albert-buildings, 6, Shandwick-place, Edinburgh.
The above Associations are all respectable, and have no connection with the advertising swindlers who delude the unwary.

WOOD-CARVING.

This is quite a remunerative occupation nowadays. Both sexes can become wood-carvers, and a very fair knowledge of the work can be gained in two or three years. At the School of Art, at the Albert Hall, South Kensington, there is a wood-carving department, where the student can join either day or night classes. There are day classes from 10 to 1 and 2 to 5 every day in the week. There are evening classes on Monday, Tuesday, Thursday, and Friday from 7 to 9. The fees are £2 a month for the day classes, and 15s. for the evening. Twelve free studentships can be won by clever operators. The outfit costs about £2. Those of artistic and mechanical tastes can rely upon a fair income by following this revived industry.

YOUNG WOMEN'S HELP SOCIETIES.

There are a number of these, their objects being to assist women to help themselves. First in importance is the Young Women's Help Society, 26, London-street, Ratcliffe, E. ; 92, Goldsmith's-row, Hackney-road, E. ; 38, Tabard-street, Borough, E.C. ; The Working Ladies' Guild, 113A, Gloucester-road, Queen's-gate, S.W. ; The United Sisters' Friendly Society—address Rev. J. Frome Williams, M.A., Strelley, Nottingham ; or Mr. C. Spilling, Corresponding Secretary, Lecture Hall, Long Melford, Suffolk.

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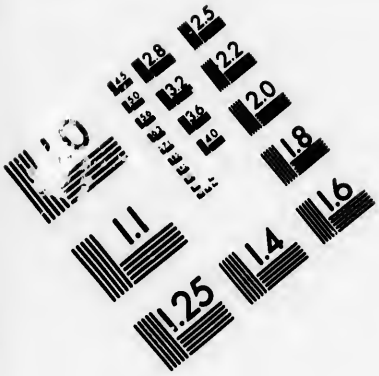


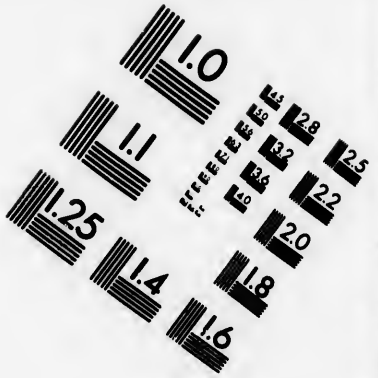
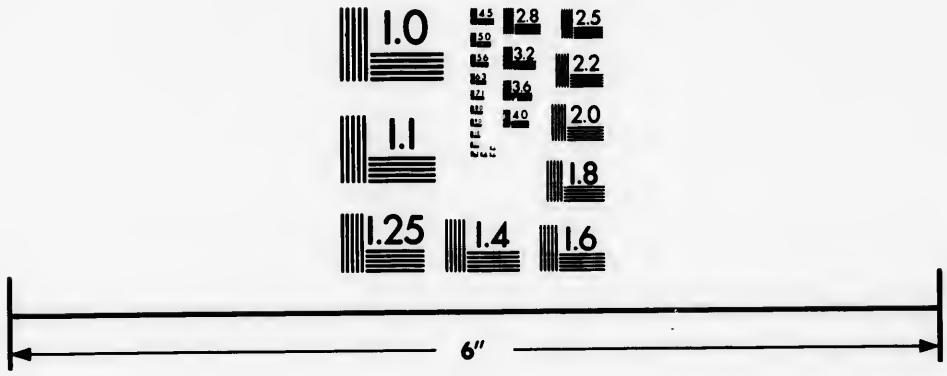
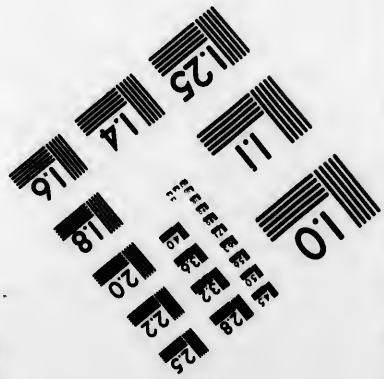


IMAGE EVALUATION TEST TARGET (MT-3)





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