

afford to give you every comfort and luxury. As I have told you, my father left me a large fortune, and I only paint for the love of it—not because I am obliged to work. I do not ask you to share a life of poverty—though some women can even do that with the men they love, and count the loss of wealth as nothing; but I cannot see why the fact that my father was what the world calls 'a self-made man,' should stand between you and me for ever, if we love each other."

"Oh, please don't be angry with me; it frightens me so when you are angry," said Millicent through her tears. "It seems impossible to make you understand how my people feel about a thing like this!"

"I am glad that it is impossible for me to understand that mere pride of birth can be stronger than love; for I believe that you do love me, Millicent," said Edmund grimly.

"Dearly, dearly; never doubt that I love you, and that it will be impossible for me ever again to love anyone in the same way. Do you know how, when one is quite young, life seems to be an unanswered question? I felt that always till I met you, and then I knew that you were the answer. You seem somehow to be mixed up with everything that is good and beautiful; and the whole world appears to me good and beautiful because you are in it."

"And yet—feeling thus—you can give me up for ever merely because of a difference in rank! I cannot understand it, as you say."

"It is so difficult to explain, but I thought you would see it."

"No, Millicent, I don't see it; and I think I have a right to an explanation."

"But an explanation would make you angry."

"I can't help that; I must have the explanation, notwithstanding."

"Well, what mother says is, that your people are so different from my people, and your way of looking at things so different from ours, that we should never be really happy together; and she says that if I married you my set would drop me, and I should have to live in your world instead of my own. Oh, Edmund, I know it is horrid of me, but I really haven't the courage to face it all."

"And yet you say you love me?"

"Yes, yes, a thousand times, yes. And what is more, I shall always love you though I will never marry you. I am not at all brave, Edmund—I never was—but when once

I really care for a person I never change. You do not speak; I know you are angry with me."

"No, I am not angry; only bitterly disappointed and wounded to the quick. But I think I do understand a little. If you married me, you would have to give up the fashionable world in which you have hitherto lived and moved and had your being, and that you consider too prodigious a sacrifice for even love to demand. If you seriously think that the lot of a frivolous fine lady is a happier and higher one than the lot of a tender and true woman, then I can only say that you are acting in strict accordance with your convictions if you finally dismiss me and my middle-class affections. I have never pretended to be what I am not; and I do not attempt for an instant to deny that all my relations—my married sisters, for instance, and my only brother—are what your ladyship would describe as 'common.' That is to say, they live in unfashionable London suburbs, and dine early, and fill their bran-new houses with unlovely furniture and ormolu clocks. All this is true; and it is also true that if you married me, you would have to know these people and to learn their habits; for no wife of mine—be she ever so high-born—shall ever come between me and my own people. Therefore, Millicent, if you have not the courage to face this thing, you are right to bid me go; but if you have the courage to stand by my side and let us face the world together, then you shall be loved with a love passing the love of women, and shall lack nothing that wealth or affection can obtain. It rests with you to decide."

"Edmund, forgive me; but I must dwell among my own people," replied her ladyship sorrowfully.

And without another word the man turned on his heel and left her; left her to enjoy that mess of society's pottage for which she had deliberately bartered her woman's birthright of love and happiness.

But though Edmund Thornton might feel angry with Millicent himself, he would not allow his sister to abuse her.

"You can't understand her, you never could," he said, when Maria expressed her surprise at Lady Millicent's decision. "She is surrounded by a hedge of customs and traditions such as a girl brought up as you have been could have no idea of."

"And you regard this hedge of customs and traditions as the divinity which doth

hedge a queen," remarked Miss Thornton scornfully.

"Yes, I do," replied her brother. "To me Lady Millicent is, and always will be, a sort of divinity; and I cannot allow even you to lay rough hands on the shrine which I have raised to her in my heart."

"Stuff and nonsense!" retorted Maria. "I know one thing, however, namely, that if I loved a man, a million relations shouldn't prevent me from marrying him, nor a million customs and traditions. I can stand against the stream, I am thankful to say, and I despise people who cannot."

Edmund smiled. "A little brown rock can stand against the stream, and a lovely white water-lily cannot; yet the rock could never despise the water-lily."

"Why not?"

"Because in the scale of creation the water-lily is a whole kingdom higher than the rock, in spite of its mutability."

"Oh, you are absurd. I believe that girl has bewitched you. Now for my part I think her a—"

"Maria, be silent!" said her brother sternly. And when he spoke in that tone Maria always obeyed.

A few days later she said to him, "Edmund, have you heard that the Roehampton are taking Lady Millicent abroad for the winter?"

"No, I had not heard."

"Well, it is true. Dr. Collins told me. He says Lady Millicent is far from strong, and they are anxious about her. But I expect she will get all right out there, and forget everything that has happened, and fall in love with somebody else."

Edmund was silent.

"And, Edmund, I don't know what you'll say, but I must tell you that I've just promised to marry Dr. Collins."

Edmund didn't say much; but he smiled grimly to himself as he pictured proud Lady Millicent as the sister-in-law of the country practitioner. Yet in spite of his smile his heart was heavy within him as he thought of the perfect life that he and Millicent might have lived together if only she had loved the world less and himself more; and he felt no anger against, but only the tenderest pity for, the girl, who, in her blindness was so passing through things temporal, that the things eternal (of which surely love was one) were in danger of being finally lost to her.

(To be continued.)

## HOW A GIRL CAN TRAIN FOR A SANITARY INSPECTORSHIP.

By JOSEPHA CRANE.



Sanitary inspectorships are now open to women, it may interest some of my readers to learn how a girl desiring such a post can qualify herself for it.

No girl under twenty-one years of age could take this post, nor can she present herself before that age for the examinations which must be passed successfully before she can be awarded the diploma which alone gives her a chance of an inspectorship. It must be remembered that the only diploma recognised by Government is that obtained from the Parkes' Institute, Margaret Street, London. No other certificates or diplomas are in this case of any value.

A girl of the required age, who wishes to be trained, must possess some qualifications likely to make it possible for her to get and keep the appointment of sanitary inspector.

Although nothing very abnormal is needed in the way of physical strength, yet a delicate girl, whose health is uncertain and who becomes easily knocked up, is eminently unsuited for the work.

Besides good health there are other things to be considered. A retentive memory, sharp and cultivated powers of observation are necessary, not only for learning enough to pass her examinations, but for retaining and using profitably what she has learnt.

Another essential is a good manner. The young person who dictates to her elders, speaks snappishly, and is careless how she offends people, will not be suited for this employment at all. As a sanitary inspector, she

often has the extremely disagreeable work of finding fault, and discovering deficiencies and nuisances in people's homes; in fact it is her work to be on the look-out for them. She is expected, however, to use moral suasion as much as she can, and with tact, common sense, sympathy, and a pleasant manner, a very great deal can be done, and often the point gained, without threatening or bringing the law into force. Of course the latter is a *dernier ressort*, and necessary when the other means fail.

Granting these capabilities, how is a girl to train? There are two ways, one far and away better than the other.

The one way which should never be taken unless absolutely unavoidable, is to study at home, not attending any lectures at all. A girl living far from London, or any centre where the lectures are held, for example, and



who still desires to present herself for examination, can certainly do so, because the attendance at the lectures and making the visits—to be explained later on—are by no means necessary. But the knowledge imparted in those lectures she must obtain in some way or another, and of course it is possible for her to do so. It is, however, only fair to warn her that she will be heavily handicapped in the race, taken neck to neck with the men and women who have been in London attending lectures and getting all the help, orally and visually, which is given to the student at Parkes' Institute.

However, if she has studied, procuring, needless to say, the books recommended by the Institute, she may be examined at one of the periodical examinations held by the council at various centres. These are in addition to the examinations held in London, and those who live in the country need not in consequence go to town. These examinations are carried out in exactly the same way as those held in London, and no distinction whatever is made in the certificate granted to the successful pupil.

To turn now to the better plan, and the one I should recommend any girl who wishes to go in for this work adopting if possible. Courses of lectures and demonstrations, visits to various places connected with sanitation, and particularly adapted for candidates who intend to present themselves for examination for inspectors of nuisances, are held twice a year in London. Sometimes they are held in the provinces, so that the girl who cannot get to London may find it possible to attend the courses if at all within her reach.

The fee for attending the course of seventeen lectures is one guinea. These lectures are compulsory. By this I do not mean that a student must personally attend all or any of them, but the learning given in them must be possessed by her. It is left to her how to acquire it. It is infinitely better for her to go to all, or as many of the lectures as she possibly can, even if she has read up the subjects, as hearing them spoken of will impress them upon her mind.

Besides these lectures there are others on physics and chemistry, which are most useful and interesting. To attend these lectures and gain the knowledge contained in them is a great advantage to the pupil, but they are not absolutely necessary, so she can dispense with them if she choose to do so, and need not fear that at examination time her omission will place her at a disadvantage with those competitors who have attended both courses.

For the physics and chemistry lectures four shillings extra must be paid.

The course of lectures extends to three months. Each lecture is given at Parkes Institute, Margaret Street, and takes place twice a week, from eight to nine in the evening, so that the lecture lasts about an hour. I say about, as sometimes they are longer. The lectures are given by well-known men. As it may interest my readers to know what some of them are like, I quote verbatim from a syllabus before me of lectures already given:—

“Ventilation, Heating, and Lighting—Sir Douglas Galton, K.C.B., F.R.S.

“External Ventilation.—Ventilation of Streets, Courts, and Alleys—Overcrowding on Space—Obstructive Buildings—Width of Streets—Height of Buildings—Model Blocks and Artisans' Dwellings—Ventilation of Rooms from Enclosed Shafts—Back-to-Back Houses—Thorough Ventilation—Angle of Light to Inhabited Rooms—Basements and Cellar Dwellings—Building Acts and Model Bye-Laws of Local Government Board for New Buildings (Open Spaces).

“Internal Ventilation.—‘Natural’ and ‘Artificial’—Means of Ventilation—Air or

Cubic Space—Volume of Fresh Air required—Composition of Air—Respiration and Combustion—Consequences of Overcrowding—Simple Tests for Impurities in Air—Warming Inseparable from Ventilation—Open Fires—Special Grates—Stoves—Hot Water—Steam—Hot Air—Lighting.”

“Trade Nuisances—Prof. A. Bostock Hill, M.D., D.P.H.

“*Effluvia*.—Influence of, on health: (a) of the strong; (b) of the weak.

“Effluvia given off from various Trades—Classification of Trade Nuisances—Methods of Dealing with Them—Powers of Sanitary Authorities, Urban and Rural, in Reference to Trade Nuisances—Bye-Laws to Offensive Trades—The more commonly occurring Offensive Trades, and the methods by which nuisances from them may be obviated.”

Then there are lectures on “How to read an Act of Parliament,” “What Acts of Parliament it is necessary for an Inspector to Read,” “The Law as to Water and Water Supply,” “Methods of Inspection,” “Dwellings, Movable and Fixed,” “Hop- and Fruit-Pickers' Lodgings,” “Stable,” “Dwellings,” “Slaughter-Houses,” “Water Supply,” “House Drainage,” “Sanitary Appliances—Cisterns—Sinks—Baths—Lavatories,” etc., etc., etc. This will suffice to show a little of the range of subjects.

After each compulsory lecture, there are visits made to Disinfecting Stations, Dairies, etc., etc. These visits are not obligatory, but still it is a great advantage to the student to make them.

These visits take place the day after the lecture. They are in the daytime, usually starting about two o'clock. Beyond the payment of her own train fare the pupil has no extra expense connected with the visits.

Some of the visits are pleasant and interesting, such as the one to a large dairy company.

Others, interesting as they undoubtedly are cannot be called agreeable. A knacker's yard and sewage farms can hardly be that even to the most enthusiastic learner.

Let us begin with a pleasant visit to the Aylesbury Dairy Company's premises at Bayswater, the following interesting particulars of which are taken from authorised sources:

“The extensive block of buildings erected at St. Petersburg Place, Bayswater, at a cost of over £70,000, and covering more than an acre of ground, were specially devised for all the purposes of dairying, and for the reception and distribution of milk, and may be taken as a type of what a milk store ought to be. They comprise:—Milk, cream, and butter dairies, constructed in accordance with the Dairy and Milk Shop Regulation Act, and wholly unconnected with any dwelling-house or living-room; a laboratory, which is maintained under the charge of a resident analytical chemist of considerable note, in order to have the greatest possible control over the quality of the milk, stabling for one hundred and twenty horses, boiler-house containing steam boilers of forty horse-power for providing the steam and boiling water necessary for cleansing all vessels used in the dairy; workshops for blacksmiths, carpenters and tin-men; clerks' offices, etc., etc. All portions of these buildings in which milk or its products, cream and butter, are sold or stored, are constructed of impervious materials, glazed bricks, tiles, or cement for walls and ceilings, asphalt, or closely-jointed flagging set in cement for floors, tin for vessels, and marble and slate slabs upon galvanised iron stands for tables and chairs.

“To guard against the contamination of milk by disease, an elaborate system of precautions has been introduced for many years. These are the inspections and survey of all dairy farms supplying the Company and the

regulation of their drainage and water-supply by the District Medical Officers of Health, the enforcement of rigid sanitary precautions in connection with the dairy-farms and the persons employed upon them; the continuous medical supervision by the local medical officers of the Company of all persons in the employ of the Company, numbering over three hundred, one of the greatest dangers that exists in London being the employment of people in dairies who, from the wretched dwellings in which they live, may at any moment carry infection to the houses they supply in their daily rounds; and the analysis of the water from farms before contracts for milk are concluded, and periodically afterwards.”

As the pupil enters the large vestibule she sees the large churns containing the milk as it comes direct from the country. Each churn is tested separately, and if found to be of the right quality is poured into the large receptacle in which all the milk is mixed together. The contents are then strained and passed by means of tubes into the lower storey where the outgoing churns stand waiting to be filled. The churns are placed under the tubes in which are taps turned on and off as required.

When each churn is filled its contents are ready for distribution among the customers.

The next thing to be viewed is the very perfect process by which these large churns and the little cans used to contain the milk are cleansed. These are scrubbed in large sinks which are in the middle of a big room. When scrubbed and scalded they are turned over steam jets which are let up through the flooring. This secures their perfect purification.

Should a Sanitary Inspector be told to inspect a dairy in accordance with the “Dairy and Milk Shop Act,” she would have to see that the walls were impervious to a certain height, that the floor was impervious, all drains be outside the dairy, and the slabs on which the pans of milk and cream stand be stone or slate.

There are also various regulations in the Act which she must see are carried out, such as that no person sleeps in the dairy, etc.

The water-supply in connection with a dairy is of the very greatest importance, therefore the inspector must examine into the position of the cistern and ascertain that it is not in communication with anything insanitary.

As a proof of the necessity for all this investigation as tending to the prevention of disease, I will quote what a well-known authority says *re* the outbreak of typhoid fever in Marylebone (August and September, 1873), which was thought to have been caused by the use of milk supplied by neighbouring farms. No typhoid fever existed in that immediate vicinity at the time, but the company which received the milk from two of these farms, which were supplied with water at this point, at once very properly insisted that the water-carts should for the future be sent a mile further on to be filled with spring water.

“Chilton Grove Farm was one from which it is believed that milk was supplied in Marylebone, and here alone of all the farms doing business with the dairy company whose customers had been attacked, had there been a case of typhoid fever. The farmer had succumbed to the disease shortly before the outbreak in the London parish. The home-stead at Chilton Grove was supplied with water from a well twenty feet deep. This was sunk close to the kitchen door, and near to foul drainage from the scullery, the yard, and the pig-styes.”

It was also discovered that ordinary sewage passed into a very dirty ditch only a few yards off, from which foul water could not help draining into the neighbouring well.



"There are," continues this writer, "grounds for belief that matter containing specific typhoid poison, during the time that the fever occupied the farmhouse and was prevalent in the neighbourhood, had gained access to the well-water which was used in washing out the milk-cans, and that in this way the milk itself had become infected. This well-water had long been known as unsatisfactory, and another well had been dug in the pasture field several hundred yards away, and the two had been connected by a drain, so that the pump had drawn from both alike."

A visit to a disinfecting station is among those to be paid, Fulham being the one selected.

The students on arrival enter a large covered-in yard where they are met by the proprietor and shown over the place.

The disinfecting machines, made of iron, are called chambers, and these can be drawn forward into the closed-in yard, and their racks, horses, and hooks charged with the clothing, drapery, pillows, etc., to be disinfected. Bedding is placed on a cradle made of thick wire. When fully charged they are run back into the chambers, which are then made air-tight by the closing of great iron doors.

The process of disinfecting is then accomplished. All air is exhausted from the chambers and steam is let in.

When the process is completed those doors of the chambers which open into the air are opened and the disinfected articles are withdrawn.

A sewage farm is among the visits. The students go down to a farm, see the filter-beds, the methods of disposing of sewage and all arrangements for scavenging.

A sanitary inspector must be fully qualified in these matters, and be able when on his work to tell people if they are disposing of the sewage in the proper way.

At water-works the student sees how water is filtered and, if necessary, softened.

The time spent at a knacker's yard is certainly not pleasant, and a girl who gets faint at the sight of blood, had better screw up her courage and determine not to faint, or else stay at home. It may be remarked that considering that women as yet are not made inspectors of meat, that this part of the programme is very unnecessary for her to go through. I do not however agree with this. It is likely that a woman may be appointed inspector of nuisances—in other words a sanitary inspector—in some country district where inspection of meat might well come within the range of her duties.

The object of a visit to a knacker's yard is that the student may gain a knowledge of meat, and be able to discriminate accurately between the flesh of a horse and that of an ox.

At the yard she is shown a horse that has died and one that has been killed, and the difference this fact makes in the flesh, although to an untrained eye there seems no particular distinction.

The student is taught by eye as well as ear the signs of diseased meat, and as most of the signs apply equally to the flesh of horse or meat generally, such knowledge is invaluable.

It is very necessary to know the difference

between ox and horse, as the heart of the latter is often passed off as ox, as well as the meat when boned.

At the Parkes Museum, which is maintained by the Institute, a great variety of the best forms of apparatus and appliances relating to domestic comfort and health can be seen, and the library of sanitary literature is at her disposal.

In the library there are a great many valuable works on sanitary science as well as a collection of reports of medical officers of health all over the country; and a reading-room well supplied with the chief sanitary periodicals, both English and foreign.

The Museum is open daily from 10 A.M. to 6 P.M., and on Mondays to 8 P.M.; the library and reading-room from 10 A.M. to 6 P.M.

The student can read and study at the library, but she should possess of her own the Public Health Acts, and one book on hygiene or sanitation, such as those written by Dr. Reid, Dr. Whitelegge, etc. Besides attending the lectures and making the visits, a student cannot expect to pass her examinations unless she works hard at the reading-room or at home. At least five or six hours daily should be spent in study and making notes.

The Public Health Acts and bye-laws she must have at her finger ends, so that when doing her work as sanitary inspector she may know exactly the limit of her powers. To take upon herself what she is not entitled to do would cause a great deal of trouble. So that in her work she must be thoroughly well up in all that the law may exact, and which she may be the means of enforcing.

The examination takes place at the end of the course. The examination fee is three guineas, of which half a guinea is remitted, if at the beginning of the course of lectures the candidate has declared her intention of presenting herself for examination.

When the examinations are held in provincial towns, the sum of one guinea extra is charged to each candidate, in order that the expenses of holding an examination out of London may be covered.

Every candidate has to pay her fee to the secretary; ten shillings and sixpence when she makes the application, and the rest at least a week before the examination day.

The examination occupies a part of two days. On the first day it takes three hours, and consists only of the written papers.

On the succeeding day the examination is *vivâ voce*, and possibly one or more questions to be answered in writing. This examination takes a very short time, from five to twenty minutes, according to the knowledge which the pupil shows she possesses. Every help is given to the candidate to reassure her and let her be at her best. She need not fear being flurried, or hurried, or in any way fussed, the aim of the examiner being to discover really what knowledge the candidate possesses, and not to trip her up or puzzle her.

At the end of the *vivâ voce* examination the pupil is told if she has, or has not passed successfully, and if the former case, her diploma is sent to her after about six weeks' time.

The following is among the regulations:—  
"Every candidate is required to furnish the

board of examiners with satisfactory testimonials as to age and personal character, and to give two weeks' notice previous to presenting himself for examination. He must be able to write legibly, and spell correctly, and possess a fair knowledge of arithmetic, so that he may be able to prepare a report on any subject connected with his duties, creditable to himself, and to the authority employing him.

"Unsuccessful candidates are allowed to present themselves at any other one examination within twelve months, on payment of half fees."

Probably some of my readers may like to know what kind of questions are asked at the examinations, so I will copy a few here from the list of questions which have been already asked, as that will give some idea of what they are like.

"What constitutes a dwelling? Enumerate the various kinds of dwellings. Under what legal restrictions are dwellings occupied?"

"State, in detail, what steps you would take, as sanitary inspector, to cause the abatement of the nuisance in connection with—

(a) A fish-frying shop;

(b) A fat-melting factory.

"Under what conditions can pig-keeping be stopped? Where it cannot be stopped, by what means can it be regulated?"

"A room in a common lodging-house is twenty-five feet long, and sixteen feet wide; it has a span roof twelve feet high throughout its centre line, and eight feet high throughout both sides. What is the cubic capacity of the room? How many adults may sleep in it? show by sketch the arrangement of the beds.

"If there is reason to suspect that sewer-gas is escaping into a house, how would you proceed to examine the drain, and to what points would you look?"

"What powers exist for abating the pollution of the atmosphere by smoke?"

Now I think I have enumerated all the particulars as to how a girl can study and train herself for the post of sanitary inspector. To go through this course of training needs careful study, perseverance in work and an intelligent way of listening, seeing, and taking notes. As will be seen every help is given to the student, and besides those named, I may say that the lectures are often illustrated by diagrams, lime-light pictures, and all that can possibly assist the student in understanding the subject being studied.

Having passed successfully and obtained a diploma, a girl however is by no means certain of work. True the field is one of the newest, and the chances in favour of her getting employment sooner or later very fair, but to hold out a prospect of absolute certainty of a post would be impossible.

Knowledge however generally turns out of use at some time or another, and a girl who has gone through this course successfully has at least some that must prove itself of value. "A little learning" is said to be a "dangerous thing." So that the pupil who is successful may congratulate herself that what she has learnt is thorough, practical, and can be made most useful in her daily life and intercourse with others, even if she fails in getting a post of sanitary inspector.

