Ceylon

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THE JILTING OF GEORGIE GERARD;

OR A BIT OF CEYLON SOCIETY LIFE.

IN 12 CHAPTERS.

BY C. LEWIS,

Formerly of Ceylon.

(*Continued from page 178.*)

CHAPTER VI.

To say that Mrs. Le Marchant was eager to hear what Georgie had to say for herself in connection with her love affair and its frustration, would scarcely express the fact. She was more than eager, keenly anxious for details.

She hoped, against hope, that all the fault of fickleheartedness, lightly made and lightly broken promises lay with the man, not with the girl.

But she was wise enough to ask no question, not even to sympathize. She knew that questioning nips the bud of confidence, and that sympathy has sometimes the contrary effect to expansion.

She sat patiently working at that perennial tatting of hers which formed such an outlet for her feelings always.

The sisters were sitting together on a sofa in the drawing-room. It was middle-day, and a hot silence pervaded the house. Breakfast was over. Mr. Le Marchant had gone to his "cutcherry," the servants to their siesta. No punkah relieves the monotony of the heat in Ceylon except at meals.

Mrs. Le Marchant had much to hear of home, and of old friends. She felt translated to another hemisphere. Georgie talked and fanned herself vigorously. But talking and fanning made her visibly hotter.

"Oh, dear! Carrie, how can you live in this steamy heat? It 's the worst I have felt, and I have no other gown to put on but my evening one. When do you think my trunks will arrive?"

"Tonight, I believe."

"By the way, Carrie, I have a parcel somewhere for you from Aunt Judith, and a letter. I daresay she says all sorts of horrid things about me. Oh! she *is* a hateful old cat."

"Georgie!" said Mrs. Le Marchant shocked and surprised. "How can you be so unkind and ungrateful to our aunt? Think of all the years she has cared for you since our loved mother's death.

"She never cared for me! She wanted to get rid of me long ago," burst out Georgie. "I am the most miserable girl that ever was—even you are not sorry for me," and the tears began to flow. "When the letters come, you will condemn me, like everybody else!"

"Georgie, dear, dearest little sister, how can you wrong me so in your thoughts? I have feared to pain you by speaking, but you know I wrote my sympathy and grief at Donald's conduct, most inexplicable as it is to me."

She got up, bent over her sister, stroked her hair, and kissed her forehead.

"Not at all inex-ex-plicable," said Georgie, between her sobs. "He was jealous, because I wrote to him about somebody else who liked me. Men are so jealous of each other always!"

"But, Georgie, surely if you were engaged to Donald, you should not have received attentions from anyone else?"

"As if I could help it!" said the girl so hysterically, that her sister became alarmed.

"Try and calm yourself, dear, you will make yourself ill, and not be able to appear at tiffin."

"Why, is anyone coming?" lifting her tear-stained face from her handkerchief.

"I asked Mr. Crawford to come. It was the least I could do after his kindness in escorting you here."

"Yes; nobody is so kind to me as Mr. Crawford was yesterday," said Georgie with pettish decision. She rose, dried her eyes, smoothed her hair, and walked away to her room. Mrs. Le Marchant remained behind, too pained and agitated for the relief of tears.

Here was a coil indeed! But she must and would endeavour not to judge her sister without further evidence.

When Lewis Crawford made his appearance before her, Mrs. Le Marchant thought she detected an enquiring surprise in his eyes, and hastened to say: "You must not expect to find us very cheerful today, Mr. Crawford, my sister and I have had a long talk, partly on painful topics."

"Will not Miss Gerard be able to appear?" asked the young man in a disappointed tone?

"Oh! yes, I hope so," said Mrs. Le Marchant,

That re-assured him, and he sat down near his hostess, and soon made her forget her anxieties in the increased cheerfulness imparted by his brightening horizon. Oh the fickleness of men, especially of young men!

Here was Lewis Crawford talking to Mrs. Le Marchant merely to pass the time until her sister appeared. More than that, here was he willing to forego his old friend, his "dear, devoted, amiable Duchess," for a chit of a girl whom he did not know, and had barely seen!

But novelty has its own charm, to an eager fancy, an easily excited temperament. Particularly is this the case in a place where no novelty dawns from year's end to year's end, save what may occur in the routine of work.

It is as if the lonely mariner, rowing in his cockle-shell boat day after day, over the same surface, plying the self-same oar, should descry one day a white sail on the horizon—what a lovely and joyful sight it would be to him, all the lovelier because no other sail was in sight!

And so in lonely stations and out of the way nooks the one spinster strikes upon the vision of the young bachelor.

In this case, when the white sail hove in sight,—in other words, when Miss Gerard's white gown could be seen, coming down the long-covered passage, or narrow verandah,—the young man's attention wandered.

Georgie came tripping along, and stopped by the way to pick a pink *hibiscus* to wear at her throat. She had employed her time so well, that beyond a slight redness of her eyelids and a coldness, scarcely perceptible to a stranger, in her manner to her sister; there was no trace of her recent outburst of temper.

"I hope, Miss Gerard, you do not feel the worse for your long drive of yesterday and the perils by the way?"

"Oh! no, I am quite well, thank you, and thank you ever so much for driving me yesterday. Oh! how frightened I was when the horse shied. I made sure I should be upset and killed!"

"What was that, Georgie? you never told me you had been in danger."

"I forgot I hadn't mentioned it before," said Georgie. "Mr. Crawford will tell you how it happened, I only know I thought we were going into the ditch and clung on to Mr. Crawford's arm as tight as I could. Didn't I, Mr. Crawford?" laughing and blushing.

"You did indeed! I am black and blue just here," touching his forearm. "It was only that Sultan gave a bad and unexpected shy at a coconut palm branch (you know his trick, Mrs. Le Marchant, of old); but we had not the lamps lighted, and had we gone into the ditch it might have been awkward. But that was our only adventure on the road. It was a perfect day."

"Here comes Marmaduke," and coincident with his appearance came the pleasing intelligence "Tiffin on table, sar."

It was quite a lively affair. Georgie laughed and talked in a light hearted girlish way, and persuaded her brother-in-law into saying that he would take her for a drive with a pair of his horses in the waggon, "very quiet horses, please."

"Some day, my dear young lady, I will gratify your wishes," began Mr. Le Marchant, but the impulsive girl would not hear of such postponement.

"Oh! today, today," she cried. "Dear Marmaduke, you will take me, won't you, this evening, this very evening? Now do!"

And she got up from her seat, and ran round the table to clasp her brother-in-law's arm, and kneel to him in a childishly beseeching way.

"My dear Georgina! pray don't be so foolish," said Mr. Le Marchant, much embarassed. "Of course you must have what you want if you go down on your knees for it!" and he laughed rather uneasily, as his dignity as grand seigneur was impaired in his eyes by the amazed looks of the solemn domestics.

And of course Mr. Crawford must come too, for fear of accidents! Mrs. Le Marchant thought she must do propriety in spite of her nerves, and said that she would acccompany them. And so Miss Gerard saw the beauties of K——— or the first time in grand style.

Mr. Le Marchant made a good if over-careful whip; and prompted by Mr. Crawford, Georgina really admired the broad lake-like tank, the purple overhanging rocks, reflected in it like a mountain; the blue distant hills, the perpetual palms and greenery around.

Of course, she wished that there were several regiments in the place! not "only one small company—how stupid!" and that there was more society in the place.

"Why, you have had no callers today, Carrie! Do you never have visitors? Won't anybody come to see me?"

"Dear, there will probably be a few Burgher ladies. The Judge is an elderly man and his wife is not here. Captain Wilson, who is in command, is a woman-hater."

Georgie pouted. "No officers!"

"And of the two subalterns one is on sick leave, and the other only cares for sport."

Miss Gerard would have much to learn or unlearn about the "Gorgeous East." That pineapples do not grow on trees, or underground like turnips! That all natives of the East are not black, nor all bungalows palaces! That life in the tropics does not mean unlimited laziness, ices, punkahs, domestics. That to keep in good health one must exert oneself a little both in body and mind. She did not approve of the latter facts as they dawned upon her!

Still, the day had been a fairly happy one. Carrie had not been so cross as she expected, and her trunks had arrived. Mr. Crawford was charming and handsome. Marmaduke was a kind old soul, and the ayah had paid her a compliment. "Missy so pretty and fat!" she had said, and Missy was easily pleased in those days.

(*To be continued.*)

TECHNICAL EDUCATION IN BOMBAY.

"What we are doing here is to supply to the artificer and the artisan of the Presidency that education which he wants, that education which will train his hand and eye, and through his hand and his eye, also his mind, by the combination of mental and of manual training," said Lord Reay in the course of his address at the formal opening of the Victoria Jubilee Technical Institute, on the 10th of April, 1889—a brief yet comprehensive definition of technical education, of the work done at the college in conjunction with the Ripon Textile School, and the Sir Jamsetjee Jejeebhoy Technical Mechancial, Engineering Workshops. And now after it has been open for almost two years (for work in reality began in September, 1888) the success of the venture is remarkable, not only for the large number of students who attend the institute, but for the satisfactory results of their tuition in the various branches.

Introduction of Technical Education.

The Victoria Jubilee Technical Institute is a standing monument to our ex-Governor Lord Reay, one of whose chief aims was the Introduction of technical education into the Presidency, and he has all the more reason to be proud of its success for more than one reason. Long before Lord Reay became Governor of Bombay, it was felt that the reading, writing, and arithmetic taught at the schools, and even the higher education of the colleges, were not all that were necessary for the youth of the Presidency. It was for long a source of complaint that the schools turned out lads who were only fit for clerks, the result being that the supply of those very necessary auxiliaries was greatly in excess of the demand. The relief from technical education cannot possibly be felt for some time, nor probably will its effect be noticeable for five years at least, when, from the progress already observable of some of the students attending the Jubilee Institute, they will be able to take their places as fully qualified mechanics in an engineering shop or in a cotton mill. So the people in generations to come will be able to look back and thank the energetic and thoughtful Governor of the Bombay Presidency who, during his term of office, worked so hard against countless difficulties, overcoming them all, and successfully inaugurated this most useful school. There were to be found many who, when the proposal was first made to found a college of technical education in Bombay, said the movement was premature, and

that the expenses would be too heavy for the students, no matter how great their numbers, to meet. That was, of course, a difficulty. A technical college was very different from an ordinary school, where the fees and Government grants were sufficient to meet the working expenses, for machinery and numerous appliances had to be found in the first place, and afterwards these and the instructors would have to be maintained at heavy cost. But Government were equal to the emergency. A sum of R25,000 was voted towards the maintenance of the institute per annum and the Bombay Municipality followed suit by voting R80,000 towards the capital, with a further grant of R5,000 a year towards the defraying of current expenses, while the Bombay Millowners' Association, who took a great interest in the scheme, while looking no doubt, to commercial interests, contributed a liberal annual grant. These, and many other private donations set the college going, and then students came forward in such numbers that advertisements had to be published in the newspapers saying the institute was full. Still numerous candidates demanded admission. This necessitated extra furnishings and fittings, which were procured as speedily as possible, and duplicate classes were formed. A list of applicants for admission was continued from which, from time to time, vacancies were filled.

The Work at the Victoria Jubilee Technical Institute.

So much, then by way of introduction; and now to see how far the scheme has been successful. The best way to arrive at this is to visit the institute, see the students at work, and by this means get an insight into Mr. Phythian, the principal's admirable mode of carrying out his programme. The instructors of the Victoria Jubilee Technical Institute do not pass their days in idleness by any means. They work early and late. Not only are they engaged with the day students from ten o'clock in the morning till half-past four in the afternoon, but they have evening classes between the hours of seven and nine o'clock. For the day-classes the fee is R36 per annum payable in three instalments of R12 in advance, and for the evening classes R24 per annum, and also payable in three instalments. For the day students the fee covers one technological group, with its complementary science subjects and laboratory practice; while for the evening classes the fee covers the science subject prescribed for mechanical engineering and cotton manufacture, physical laboratory practice, and lectures in cotton manufacture. As regards the qualification for admission, day students must be above the age of fourteen years, and have passed the Fifth Standard and produce a certificate with a true copy to this effect before admission, while evening students must be above fourteen and produce a certificate or pass an examination in reading, writing and arithmetic before admission. The stipulation requiring the students to show certificates as having passed the Fifth Standard is necessary, in that the instruction is given in the English language, there being no vernacular technical literature to teach the subject. This, while being a difficulty to some students, is an advantage to them too, for as Lord Reay himself pointed out, the way in which a student answers a question in a language which is not his own will surely betray whether or not he has mastered the subject. But this stipulation though advisable in order to prevent unqualified candidates for admission coming forward, has hitherto been found almost unnecessary, as the list of pupils shows. Of Fifth Standard boys there are only nine, while there are 56 who have passed the Sixth Standard, and as many as 139 or more than half of students attending who can show certificates as having passed the Seventh Standard. Over and above that there are four who have passed the University Entrance examination, making the total number of day students 233, 198 of whom study mechanics and 35 cotton manufacture. The ages of most of the students are from twenty to twenty-two, although they vary from fifteen to twenty-eight, the average age over all being 2½. The evening students who at the beginning of the session numbered 119 have now dwindled down to 74. But this is not to be wondered at. The night-students are young men who have work to attend to during the day, and as most of those who have left are young men who reside far away from the institute, it is not very surprising that during the rains they should prefer to rest at home after their day's toil. That being so, it may readily be guessed the seventy-four who do attend are very much in earnest with their work. The students are of almost every class and creed in India. Attending day classes, there are of Europeans and Eurasians, Portuguese and Christians who are classed under one head 16, and there is only one Jew. The Mahomedans do not seem to recognise the importance of technical education. They showed little interest in the scheme to commence with, sending only five students to the institute, and now there are only three. Hindoos and Parsees, however, fill the school, there being 134 students of the former race, and 79 of the latter.

The Physical Laboratory.

"In the first place," said Lord Reay, in his memorable and practical opening address, "we want a laboratory for technical chemistry." That has been provided. In the laboratory simultaneously with his engineering or cotton spinning classes, the beginner is grounded in the elementary conditions of, together with the investigation into the laws and phenomena of sound, light, and heat, magnetism and electricity. The name of "Physics," being generally applied to these, it is called the physical laboratory, which is divided into two departments, the students in the one studying the closely-allied sciences of sound, light, and heat, and in the other the equally similar sciences of magnetism and electricity. In each section the student has his own table to work upon, fitted up in a very handy fashion after Mr. Phythian's own ideas. In front of the table is a desk-drawer, which may be drawn out, and in and above him; within easy reach of his hand is a glass-door cupboard wherein he keeps all his instruments and appliances, so that while working out any experiment he has everything at hand, and has no need to leave his stool. Two hours are spent by the student every day in the laboratory, the first hour at laboratory practice, and the second hour in the lecture hall. On entering, in the morning, the student is set an experiment. He is left alone to work it out, and draw his own inferences from it. All the while the instructors go round the laboratory, watching the students at work, taking note of their difficulties, of the means they use to overcome them, and of whatever mistakes they make. Then in the lecture-room the nature and use of the experiments are explained, and wrong inferences corrected. The lads are brought upon the platform, asked to repeat their experiments, and whatever mistakes they may have been liable to fall into, are explained to the whole class. It takes three years to go through the physical laboratory, the class being taken in conjunction either with engineering or cotton manufacture, and being equally necessary in both.

The Engineering Workshops and Foundry.

In the institute proper are the examination halls, the class-rooms, and offices. One of the most interesting rooms is the drawing-room, where there are desks provided for 120 students. The hall with the lads at work is just like the drawing-room of some large engineering work shop. There they are given designs to draw to particular scales for machinery or parts of engines, &c. The drawings finished, are taken to the pattern-making department where they are left in charge of students who have to design them in wood. We are now in the Sir Jamsetjee Jeejeebhoy Technical Mechanical Engineering School, through which it takes the student three years to pass. It is divided into six different departments, namely (1) pattern making, (2) foundry, (3) smithy, (4) machine tools, planing, &c., (5) turning lathes, (6) fitting and filling. The first has been already referred to; and from the pattern room we naturally turn to the foundry, with the students at work at their moulds. Saturday is the only foundry day because there is a considerable amount of expense connected with the filling and feeding of the furnace for melting the metal As in other foundries, the ground is all laid with sand to the depth of about eighteen or twenty inches, and in that the moulds are made by means of the patterns. The running of the metal into the moulds is a matter which requires the greatest of care; it would be only too easy for the molten metal when being dropped into the moulds to splash upon the young workmen, but although lint and oil are always kept ready in case of any such accident, they are never required. Next to the foundry is the smithy in which there are eight anvils, two young artisans being employed at each. No handwork is required to feed the forges, the fires being blown by a powerful fan which drives compressed air through a pipe, serving all the fires at once. Besides working the experiments set them to do, the young students will often be found here employing their time by manufacturing tools for themselves, which teaches them a good lesson in economy as well. One of the most interesting department of all is the fourth, above referred to, where the students are instructed in all the uses of machine tools and how to plane, &c , while in continuation of this we find them engaged doing different kinds of mechanical work on turning lathes. The students seem to like this branch of their studies, and the aptitude with which the young natives, Hindoos and Parsees alike, learn how to use the various machines is spoken of most favourably by their instructors. Nothing seems to please them more then to manufacture pieces of machinery to replace parts that have become worn or damaged, and to find their works successful. The most important department of all is the fitting and filling where the pieces moulded in the foundry are trimmed, filled, and smoothed down to the requisite size and fineness. To look at it seems a very simple matter, but in reality it is most difficult, requiring a great deal of perseverance, patience, and care. Here the students are provided with Sir Joseph Whitworth's surfacing plates and gauges, by means of which work can be tested and measured up to the thousandth part of an inch. This is the tedious nature of the work, and the students must exercise the greatest delicacy in the handling of the tools.

The Ripon Textile School.

In the Ripon Textile School the students are not only taught how to handle the machinery, but are made thoroughly acquainted with its various parts, and how to rectify any damage that might possibly occur in the working of a mill—to become in fact, thoroughly practical machinemen. The way they are taught is in this manner. At present an old set of spinning machinery and looms have been secured. They have all been thrown in a litter on the floor, and the students are being set to build them up and put them in working order. They will then be required to take them all down to pieces again in order to allow another batch of students to undertake the same task. By this means they cannot fail to gain a thorough understanding of the component parts of the machinery in use in mills. The Ripon Textile School is just a complete cotton mill, fitted up with all the newest and most improved machinery. First of all, there is the *kalâ* —a machine for separating the cotton from the pods—the first of its kind ever introduced into India; so that the Victoria Jubilee Technical Institute is in advance of most of the Bombay mills at present. Then there is another machine for separating the cotton from the seeds, which is the first stage in the manufacture. And now we begin to find out what a tremendous amount of labour there is in the preparation of cotton, and how many stages it has to pass through. The cotton has next to pass though a mixing machine and breaker in order to attain a uniform blend. From that it passes to a machine that opens it up, which is the commencement of the cleaning process; and then it pass to the "beater,' and thence to what is known as the "cages." These cages are round like cylinders, from the inside of which the air is exhausted. The fine dust passes from the cotton through the interstices of the cages, and is carried outside through the flue, the cotton being left outside the cages and passed on to another machine, where it undergoes another vigorous beating, being whirled round at the rate of fifteen hundred revolutions per minute. Continuing the cleaning process, it passes to a second pair of cages, then through the calendar galleries on to the lap spindle, which teases the cotton out on fine needles and rolls it out in one fit sheet of fine flakey wool. The carding, the most important of all, is the next stage, and following that the cotton is put on the "drawing" frames, which are for the purpose of doubling the "silvers," and laying the fibres perfectly parallel with one another. Then there is what is called a "slubbing" frame, through which the fibres have to pass on to the first lot of bobbins. From these they pass through several other machines on to various sets of bobbins the threads being drawn out finer and finer in each machine until they attain the proper fineness, when it is ready for the looms, of which there are three called the "underpick" loom, the "fast reed," and "overpick" loom. In addition to these there is a "jacquard" for weaving fancy cloths, and on this the students are taught to weave calicoes and ornamental fabrics, in mixed cotton and silk. It will thus be seen that nothing is wanting in the Ripon Textile School to bring the students to a thorough state of efficiency, both as cotton spinners and competent machinemen.

The Curriculum.

Returning once more to the Institute, we find a library not only of all the books required in all the various classes, but of other more comprehensive and valuable works to which the students have access for reference when necessary, while the walls of all the class-rooms are hung with diagrams for reference in the course of lectures.

In conclusion, the student by perseverance and attention to his work—which is by no means light, for in the Victoria Jubilee Teachnical Institute the young artisan must work hard, both mentally and manually—is taught precision in the production

of all mechanical details. The engineering curriculum covers steam and the steam-engine, including the lines prescribed by the Bombay Boiler Inspection Act. In the Ripon Textile School, the working of the machinery in which we have attempted briefly to describe the students are taught a series of science subjects, machine-drawing mechanics, steam treated with special reference to cotton machinery, and also physics with laboratory practice; and it ought to be mentioned—for it may not be generally known, though it was made public when the Institute was opened—that the splendid set of machinery was the gift of Messrs. Platt Brothers of Oldham, while Messrs. J. Meredith Jones and Sons of Wrexham have recently presented to the school a set of patent self-acting machines for preparing leather for splicing roller coverings.—*Bombay Gazette.*

DAYS OF OLD IN CEYLON.

(*Reprinted from the "Colombo Journal" of 1833.*)
(*From the "Ceylon Government Gazette."*)

The Right Honorable the Governor has directed, that the following draft of a Proclamation be published in the Ceylon Gazette for general information.

By His Excellency's Command,

(Signed) P. ANSTRUTHER.
Dep. Sec. to Govt.

Colombo, 31st December 1832.

In the Name of His Majesty WILLIAM THE FOURTH of the United Kingdom of Great Britain and Ireland, King, Defender of the Faith.

PROCLAMATION.

Whereas it appears to us expedient to repeal the several provisions now in force respecting the sale, importation, and removal of arrack and other spirits within the Kandyan Provinces for the purpose of consolidating and re-enacting the same with certain alterations.

1. Now it is hereby enacted, that the Proclamations of the 25th day of April 1820, of the 11th day of November 1820, and of the 11th day of November 1824, shall be and the same are, hereby repealed, except in so far as concerns any offences, fines, or penalties, hitherto committed or incurred, under the said Proclamations or either of them.

2. And it is hereby further enacted, that any person who shall be convicted of bringing or procuring to be brought into any part of the said Provinces, or of removing or procuring to be removed, from one part thereof to another, any arrack or other spirituous Liquor, without a license signed by the Chief or Deputy Secretary to Government, or by the Collector or Agent of the District from which the same is brought or removed, specifying the quantity and description thereof, the place from, and to which the same shall be brought or removed and the period for which such license is to be available, shall be sentenced to pay a fine of £1 17 6 for every Gallon of spirits so brought or removed and in proportion for any less quantity, and in default of immediate payment, shall be imprisoned and put to hard labour till the fine be paid; such imprisonment not, however, to exceed twelve Months; and the spirits so brought shall be confiscated.

3. Provided always, and it is hereby declared that this Proclamation shall not extend to arrack or other spirituous liquor the property of the Crown, nor to spirits, other than arrack, being bonâ fide the property and intended for the private use of Officers Civil and Military, removed from one district to another,—or to quantities of Arrack not exceeding half a Gallon removed from a licensed place of retail by the purchaser, or for his account, to any other place within the Korle, not being within the limits, duly declared by Government advertisement, of any station whereat by Government Advertisement a Military Canteen now is, or hereafter shall be established, for the retail of arrack.

4. And it is further enacted, that any person who shall be convicted of selling arrack or other spirits, without being licensed to do so by a written license bearing the signature of an Agent of Government for the Kandyan Provinces, shall pay a fine of £3. 15. 0. for each offence, and in default of immediate payment, shall be imprisoned and put to hard labour till such fine is paid; such imprisonment however not to exceed twelve Calendar months.

5. And it is further enacted, that it shall not be lawful for any person or persons to distil any arrack or other spirit within the said Provinces, unless for account of or by a special License from Government, nor without such license, to have in his possession any still or apparatus for the purpose of distilling arrack or other spirituous liquor, contrary to this Proclamation; and any person who shall be convicted of distilling arrack, or any other spirit, except on account of, and by license from Government, as aforesaid, shall pay a fine of £3. 15. 0. for every Gallon of spirit distilled, and proportionably for a less quantity; and any person convicted of having in his possession any still, or apparatus for the purpose of distilling contrary to the true intent and meaning of this Proclamation, shall pay a fine of £3. 15. 0. and in default of immediate payment in such case respectively, shall be imprisoned and put to hard labour till the fine is paid, the term of imprisonment, however, not to exceed twelve Calendar months; and all stills or apparatus used or prepared for illicit distillation, shall, with the building in which the same may be, and all liquor found therewith, be confiscated.

6. And it is further enacted that any person, save and except a licensed retailer, in whose possession arrack should be found in the same provinces, which shall have been bought or bartered, or otherwise obtained from *any person other than a licensed retailer*, shall pay a fine of £1. 17. 6. for every gallon thereof, and proportionably for a less quantity and in default of immediate payment, shall be imprisoned and put to hard labour till such fine is paid, the term of imprisonment not, however, to exceed twelve Months; and arrack so found shall be confiscated.

7. And it is further enacted, that the sale or barter of Toddy, except by license under the Signature of an Agent of Government for the Kandyan Provinces, is hereby declared to be unlawful, and any person convicted of selling toddy without such license, shall pay a fine of 15*s*. for each offence, and, in default of immediate payment, shall be imprisoned and put to hard labour till such fine be paid, the term of imprisonment, however, not to exceed Three months.

8. And it is further enacted, that convictions for offences against these regulations shall and may take place before any Agent of Government having local jurisdiction in the Kandyan Provinces, and that half of the fines imposed shall go to the Crown, and the other half be paid to the person prosecuting the offender to conviction,—Provided always, that in the event of the inability of any defendant to pay the fines above directed, and sentence of imprisonment being awarded, the Revenue Department shall nevertheless pay to the Prosecutor the full amount of the share he would have been entitled to, if the said share shall not exceed Fifteen Pounds; three-fourths of such moiety if it does not exceed thirty Pounds; two-thirds when it does not exceed Forty-five Pounds; one-half when it does

not exceed Twenty five Pounds; one-third when it does not exceed One hundred and fifty Pounds; and one-fourth in all other cases.

At a General Meeting of the Subscribers to the Stand on the Galle Face held at the King's House, Colombo, the 29th December 1832.

HIS EXCELLENCY THE GOVERNOR IN THE CHAIR.

Resolved,—1st. That it is extremely desirable no longer to delay the completion of the Stand upon the Galle Face, with every possible attention to economy in the mode of executing this object.

2nd. That the sum of Two hundred Pounds appears to be the smallest sum which can guarantee the completion of the stand on the principle recorded in the preceding Resolution.

3rd. That each original subscriber of one share of 6*l.* shall be deemed to be holder of three shares of the value of 2*l.* each.

4th. That a new subscription be immediately opened at the Library, for the purpose of disposing of 75 new shares of 2*l.* each.

5th. That it is satisfactory to the meeting to hear, in the event of 50 of these shares being disposed of, the Governor will take on himself the responsibility of advancing 50*l.* on the part of Government.

6th. That the building shall not be proceeded with until these 50 shares have been subscribed.

7th. That any extra subscriptions or any excess of the proposed new subscription over and above the actual Expenditure, shall be placed in the hands of Trustees to be applied for the purposes of repairs.

8th. That a select Committee be appointed for the purpose of conferring with the Colonial Engineer and of having a drawing of the stand executed as proposed to be finished.

9th. That the drawing be placed in the Library, and after the subscription of 50 shares, the adoption of the improvements suggested, be referred to a General Meeting.

10th. The resignation of Dr. Forbes as Secretary having been received,

Resolved,—That the thanks of this meeting be given to that Gentleman for the zeal which he has uniformly shewn in promoting the original object of this meeting.

11th. That this meeting receive the communication with great satisfaction, that Mr. Granville will undertake to execute the duties of Secretary, in addition to those of Treasuer.

WM. GRANVILLE.
Secretary.

List of additional subscribers to the stand on the Galle Face on the plan proposed in Resolution No. 3, at the General Meeting of the 29th December 1832.

		£	*s.*	*d.*
His Excellency the Governor..	8 Shares..	16	0	0
The Venerable the Archdeacon	2 do....	4	0	0
H. Tufnell, Esq.	3 do....	6	0	0
Captain Macready	2 do....	4	0	0
J. N. Mooyaart, Esq.	1 do....	2	0	0

REPORT ON THE CANAL FROM ELLEHARA NEAR MATELLE TO MINNERY AND THENCE TO GANTALAWE NEAR TRINCOMALIE.

BY MESSRS. ADAMS, CHURCHILL AND BAILEY.

(*Continued from page 184.*)

We have thus satisfactorily ascertained, that the water was conveyed from the Ambanganga, near Ellehara to Kondrowawe, and thence into Minnery Lake. That another canal led the water of that Lake above the level of Kowdella to Gantalawe, thus verifying the native tradition, which we found consistent and unvarying throughout the whole line, until we reached the Malabar country, a distance of not less than 57 miles. Mr. Turnour, in his notes on canals and water-courses, in the Ceylon Almanac for 1833, remarks, that "under the most favorable circumstances, their length is double, and in some instances, four and five times the direct distance. Judging from these peculiarities, and giving a conjectural opinion in each instance, of the nature of the country, a Canal from Ellehara to Kandelly would exceed one hundred miles." Our survey shews that Mr. Turnour over-estimated the length of the canal.

We have also ascertained, that Kowdella was filled by another canal from Minnery. That a canal connected Kondrowawe with Giritelle, we have no moral doubt, although our time was too limited to enable us to explore it. We had it cleared for six miles, and rode along it nearly two miles, and the traditions at Kondrowawe and the neighbourhood of Giritella, entirely coincide. It will be seen, that there are still other canals connected with these, which we have not been able to explore; but we trust that the results of this expedition may afford a clue to the unravelling, at some future time, of the wonderful net-work of canals with which this part of the country was intersected

"To have traced the line of the Ellehara canal through a mountainous country, alone evinces the knowledge and great exertions of the natives of a former date."*

Had Mr. Brooke been in possession of the information which we have since obtained, the foregoing remarks would have told with ten-fold force, for not merely did the projectors of this canal display profound engineering skill, in completing the work, but they formed, and carried into effect, the still more wonderful conception, of uniting a portion of the waters of the Kiri Oya, a river flowing on the opposite side of a high range of hills, with those of the Ambanganga at Kondrowawe, thence distributing them by minor canals throughout the country, and eventually reuniting the waters of the Kiri Oya in the Minnery Lake.

From our observations during the survey, we think it probable that the face of the country was at that time comparatively free from jungle; and that, therefore, the difficulty of taking accurate levels was not then nearly so great as it would be at present. It seems, however, probable, from the growth of the forest in the bed of the canal, that many centuries have elapsed since it fell into disrepair.

In contemplating the grand conception of the projectors of these works,—the economy of labour in availing themselves of the natural features of the country, and thus securing such great results by the construction of a single embankment;—the wisdom displayed in diverting a large river from its profitless course, and thus diffusing wealth and prosperity through a previously barren waste,—and the forethought in securing to account the drainage of the vast expanse of country, through which the canal passes, cannot fail to excite wonder and admiration.

It is melancholy to regard the present altered condition of a country once brought by so much skill and labour to a state of perfect fertility. The Ambanganga now rolls on in its former unprofitable course. The streams, once checked and diverted into numberless Tanks, flow through the breaches of the embankment, and are lost in the forest; and the whole country has become again a desolate and unhealthy jungle. Even at this, the most healthy season of the year, out of about 40 people who accompanied us, only seven have escaped fever and dysentery.

The population of the few remaining villages is annually decreasing. Between Ellehara and Kondrowawe, we passed near five villages recently deserted, and many places were pointed out to us as the sites of villages abandoned within the last century. Some idea may be formed of the depopulated state of the country by the fact, that in a distance of 24 miles,

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* Brooke's Report, p. 61.

there is not one inhabited village, although we passed some fields which are still occasionally cultivated by the people of either Ellehara or Kondrowawe.

The excellent state of repair in which we found the embankment from Ellehara to Kondrowawe, suggests to us the feasibility of restoring these works to their former state; but we do not think that any benefit would arise from the repair of the canal from Kondrowawe to Minnery, as the waste water would naturally fall over the spill-water, into the Talawatura, and so into that lake, and the canal which we traced can only have been formed in order to complete the line of navigation. We are not in a position to speak with an degree of certainty as to the practicability, or otherwise of repairing the line from Minnery to Gantalawe.

To revert to the first part of the work. The Dam across the Ambanganga could easily be rebuilt; and the repair of the fourteen important breaches which occur in the entire line of embankment, present no serious engineering difficulties. A natural bed of rock having in every instance been selected for the spill waters, their restoration would be comparatively easy. To effect these repairs, a large force of men would be necessary, as operations could only be carried on for about three and a half months in each year, owing to the floods during the rainy season. A great obstacle, too, would be found in the difficulty of obtaining a sufficient supply of water for the workmen.

It would be useless, however, to attempt these repairs, unless Government were prepared to import population, on an extensive scale, for the cultivation of the lands which would be made available by the vast supply of water, which would then be at command. But this does not seem an insuperable obstacle when we take into consideration the over-populated state of parts of the South of India, which is such, that in one of the 20 provinces of the Madras Presidency alone, a few years back no less than 200,000 people died from famine in one year; and we believe we are correct in stating, that last year, the Government was compelled to support 100,000 people to prevent them from meeting the same fate.

Before entertaining the idea of repairing these works, a trigonometrical survey of that part of the Island would be indispensable, in order to ascertain what the effect of the accumulation of so large a body of water would be upon the adjacent country; and for this, great natural facilities exist, in consequence of the numerous isolated hills with which the neighbourhood is studded. We have ascended several of these isolated points, and examined the country with a view of ascertaining the feasibility of a thoroughly organized system of triangulation. (Note No 4).

We originally planned this expedition for our own satisfaction; but finding that its results have so greatly exceeded our expectations, we have resolved to communicate them to Government, hoping that they may prove not devoid of interest.

ALEX. YOUNG ADAMS.
Sept. 9, 1855. JOHN F. CHURCHILL, C.E.
J. BAILEY.

Memorandum.

On the Yodia Bende Ella, by which the water of the Kalooganga was conducted to the Ambanganga, into which it fell at the point at which the Dam was constructed, for the purpose of turning the water, of both rivers into the "Sea of Prakrama."

Having been informed by a priest in Kandepolle, that the canal which we surveyed from Ellehara did not commence at that place, but at some distance to the south-east of it, in the Laggalle Corle, I determined, on the first occasion on which my other duties might lead me into that district, to make enquiries on the subject; and having had an opportunity, within the last few days, of doing so, I have ascertained that the information received from the priest was correct.

The first point at which I came on the Canal which had been described to me, was at an abandoned village about 12 or 14 miles from Ellehara; and from thence I traced it in an easterly direction for about 2 miles. I was then obliged, by the thickness of the jungle in its bed, to leave it and take an elephant track, by which I rejoined it a few miles further on, and after going for some miles, sometimes in the bed of the Canal and sometimes along paths in its immediate vicinity, I reached the village of Wellwarunagolle, from whence I traced it to the Kalooganga. On this river, as on the Ambanganga at Ellehara, advantage has been taken of a natural rock running across the whole breadth of the river; and on this, as a foundation, a masonry Dam was constructed, by which the water was turned into the Canal, which runs from this point in a north-westerly direction. On the north-eastern bank of the river, and at the extremity of the Dam opposite to that at which the Canal commences, are the remains of a spill water having a water way of 54 feet, and paved to a breadth of about 24 feet from the edge over which the surplus water fell. The stones forming the spill-water, were each about 4 to 5 feet long, by 1½ feet broad, and the bonding differed slightly from that of the one at Ellehara. The embankment of the Canal, at the point at which it leaves the river, is from 40 to 50 feet high, varying, in different places, with the level of the ground below it, and it is, in general less perfect than the embankment below Ellehara.

From this circumstance, and from the stone work of the Dam being of a ruder character than that of the one across the Ambanganga, it might be concluded, that the Hattotte Ammuna was constructed at an earlier date than that work; but both these differences may be referrable to the circumstances of the body of water to be turned by this Dam, and conducted by this Canal, being much smaller than at Ellehara. If this latter supposition is the true one, it would explain the statement in the Mahawanse, that Prakrama Bahoo turned the waters of the Karaganga into the Sea of Prakrama, and the similarity of the names Karaganga and Kalooganga seems to give some probability to the theory. If the Sea of Prakrama was formed by the Dam across the Ambanganga, we may reasonably infer, that the Canal from the Kaloonganga was the Godaviri Canal, which the waters of the Karaganga were conducted to the Sea of Prakrama.

I was much struck by a circumstance which occurred at the Hattotte Ammuna. While examining the Dam, an old Gamaralle said, "We have always had a tradition in our village, that the king kept boats at Ellehara, tied to a Tamarind tree there, and that they were sent up here with people to clean the Canal." On questioning the old man, I found that he did not know of the existence of the tree at Ellehara, but spoke merely from traditional knowledge.

I had not time to go back along the bed of the Canal as far as Ellehara, but I found two villagers who had gone the greater part of the way; and I have no reason to doubt that the Yodia Benda Ella does join the Ambanganga, as described. The distance from the Hattotte Ammuna, along the Ella to Ellehara, is stated by the villagers to be about 30 or 35 miles; but I am inclined to think that it cannot be so much, and it is certainly not much more than half that distance in a straight line.

An unsuccessful attempt was made some years since, by a priest, to repair the breaches in the embankment of the Yodia Bende Ella, sufficiently to enable the people to convey enough of water for the irrigation of some old paddy land, which is now cultivated as chena. A number of villagers from Laggalle Udeliapatoo, whose ancestors held lands below the Ella, stated, that from 500 to 600 ammunams of paddy land could be brought into cultivation, if the embankment were repaired, even to the extent contemplated by the priest; and that there was a population in their villages, more than sufficient to cultivate the whole of it. There was no Headman in attendance, on whose information I could rely; but if their statements were correct, the results of the work would be very large in proportion to the expenditure. The people, in urging me to bring the matter under the notice of Government, continually referred to the work at Ellehara. In that case, the proportion of the expenditure contributed by Government was only about £25; and

the result, according to the statement of the Coralle, was an increased cultivation of 44 ammunams in the second year after the work was completed.

After leaving the Yodia Bende Elle, I crossed the Ellunna Kande range of hills; and along their north-eastern base, I discovered, at intervals, traces of another canal, which, on inquiry, I found to be the Minipé Ella. I afterwards met with an old man who had crossed it at different places and traced a great part of it at different times. I also saw the Villegame Aratchy, who had been desired by Mr. Power to trace the Ella, and who had done so to some extent, but had been prevented from completing his work by illness: From his information, and that of the old man above referred to, I have marked down what I suppose to be the course of the Ella, in the pencil sketch which accompanies this. If my informants' statements were correct,—and I have no reason to doubt that they were,—the Minipé Ella must have been of at least, as great importance as a work of irrigation as the Ellehara Canal.

ALEX. YOUNG ADAMS.

Hamberewe, 26th July 1856.

NOTES *referred to in the foregoing Report.*
No. 1, page 2.

Vide Turnour's Notes, published in the Ceylon Almanac, 1833, on Canals and Water-courses:—"The ambition and vanity of that sovereign [Parakrama Bahoo] made him change their names, giving them the appellations of the great rivers of Dambadiva, [the Continent of India]. For example, the Goodaavairee Canal, from the river Godavery in India.

At a late meeting of the Society of Arts, Colonel Cotton, so well known as an advocate for the improvement of Public Works in India, contends, perhaps with a basis in favour of his own opinion, 'that our Indian possessions would be more benefited by Canals for irrigation and navigation, than by great trunk lines of Railways. Without a proper supply of water, the people are always liable to famines, and the marvellous fertility of the country remains undeveloped.' He 'proposes to improve rivers, to clear out the old canals which have become choked up by long neglect. The region watered by the Godavery alone would produce more Cotton than we want.'"

No. 2, page 4.

See Turnour's Notes, Almanac for 1833, p, 277:—"Before I make any extracts from that gentleman's interesting Report, I give the following literal translation from the Mahawansa, which contains an account of the principal canals in the reign of Prakrama, in the twelfth century, when they were brought to the highest state of perfection. The ambition and vanity of that sovereign made him change their names, giving them the appellations of the great rivers of Dambadiva, and calling the lake he formed, after himself, 'the sea of Prakrama.' The king [Prakrama] formed the deep canal called the Makara Ganga, which flowed from the Makara outlet of the Sea of Prakrama: from the same sea, the great canal Haima Wattee flowing to the Maha-Maigee Wame. From the outlet called Samanmal, the canal distinguished by the name of Neela-Wapane: flowing from the outlet called the Keela-Kara Oodyaane, the Salala-watte Canal; flowing from the outlet celebrated under the name of Waitra-Wattee, the Waitra-Wa ee Great Canal: from he southern outlet, the Toonghabadsa Canal; flowing from the Mangala outlet, the Mangala Ganga Canal: flowing from the eastern outlet, the Champua Canal: flowing from the same sea to the Poornawardhana Tank, the Saraswastee Canal: flowing westward of that (Sraswastee) canal, the Waimawattee Canal.'

"It is nowhere specifically stated in the historical records, that any of these Canals were navigable, but it is the general opinion of the natives, both of the learned and of those residing in the neighbourhood of these works, who have derived the information entirely from tradition, that the principal Canals which received the names of rivers, were navigable for canoes as far as Ellehara on the Ambanganga. The Sea of Prakrama with its many outlets as yet unknown, or at least unnoticed, whenever it is discovered, it will probably be found, like the bed of the Kalawawe tank, a forest in no respect differing from the rest of the wilderness in which it is situated."

The Survey annexed to this Report will shew, that one immense embankment extending for upwards of 24 miles, forms a series of 9 lagoons, connected with each other by nine Canals. If Prakrama did change the names of existing canals (for if they had not existed in some degree, how could he have changed their names, which, we have Mr. Turnour's authority for stating his ambition and vanity induced him to do,) this alone would account for the difficulty of identifying the "Sea," and seems to confirm the position which we have taken, that Prakrama Bahoo only enlarged and improved upon Mahasen's previous work.

Our inspection of the Canal proves, that not only was it navigable for canoes, but for vessels of considerable burthen; and in all the villages through which we passed we found this tradition existing. The Tamarind tree alluded to at page 5, is a remarkable proof of its existence at Ellehara, and the people who pointed out to us the ruins of Mahasen's palace near Galoya, on the banks of the Canal beyond Minnery, a distance of about 40 miles from Ellehara, described it as his halting place in his voyages up and down the Canal.

No. 3, page 9.

Vide Turnour's epitome of History of Ceylon.

Mahasen, A.D. 275. Bud: 818.—"He also formed 16 other great tanks, and cut the Talawattu Ella canal, by which means he formed 20,000 fields, which he dedicated to the Dananakka Wihare, whence the rice grounds got the name of Dantalawe (Gantalawe or Kandely)."

We have now ascertained that a canal did exist from Kondrowawe, which conveyed the waters of the Ambanganga into Minnery, whence they were led to Gantalawe. The water which now escapes through the breaches of this canal, as well as that which falls over the spill-water at Kondrowawe, meet and form a stream which now falls into Minnery. This bears the unusual name of Tallawatura. Is it not fair to assume, that this name is but a corruption of Tallawatura Ella?

(To be continued.)

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