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VIEW ON THE UPPER OTTAWA, FROM OISEAU ROCK.

THE

CANADIAN MAGAZINE.

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THE "MACHINE" IN HONEST HANDS.

BY HERBERT B. AMES.

President of the Montreal Volunteer Electoral League.

During the closing weeks of the month of January, 1894, several hundred men and women, prominent throughout America for their interest in the cause of municipal reform, were assembled in the city of Philadelphia, to take council together regarding the best methods of bringing about their common desire. Almost synchronous with the deliberations of this representative body a criminal prosecution was in progress in Brooklyn, the defendant in the case being one who had for years successfully defied authority in the most flagrant violation of the election laws of the state of New York. While the Philadelphia reformers were discussing the improvements in civic administration that a well disposed municipal body might be expected to make, with hardly a word relative to practical work at the polls, the trial of the "Boss of Gravesend" was demonstrating beyond a peradventure that reform, to be effectual, must commence at the ballot box, and that as long as election laws can be evaded and a community be defrauded of its electoral rights, only corrupt men and corrupt measures are possible. It is common nowadays to heap abuse upon the "machine," but until the reformer can learn the practical lessons that the "machine" is prepared to teach him, his abuse of that instrument will have little result in impairing its effectiveness. The "ward boss" not infrequently remarks: "We will give you the press, the pulpit and the indignation meeting, provided there be left to us undisputed control of the registry list and the ballot box." And in his shrewd choice of weapons the "practical politician" has ofttimes won the fight before he has even met the enemy. The city of Montreal is not, perhaps, universally regarded as the most progressive city upon this continent, but it has been one of the first to learn that the only road to substantial reform in municipal administration is through the sanctity of the ballot box, and the adoption of "machine" methods on lawful lines. It is to give an account of the way in which this lesson was learned and acted upon that constitutes the *raison d'etre* of this article.

Montreal, like many another city, has for some years past tolerated a thoroughly corrupt administration. During the past two years matters had gone from bad to worse. Valuable franchises had been practically given away to favored and, it is reasonable to suppose, favoring corporations.

While Toronto annually receives $125,000 for her Street Railway privileges, the Council of Montreal recently granted similar privileges for thirty years to a company this year paying the city only $25,000. Although there were three other lower tenders, the contract for electric lighting was renewed with the old company at $124.10 per arc light annually, and the tenders of the other companies, offering to save the city $25,000 a year, were not even opened. A paving contract was given to a contractor whose tender was the highest by $12,000. A public property was purchased by the Health department, with the consent of the council, for eighteen cents, that, in the morning of the day of purchase, had been sold for twelve cents per square foot. The debt of the city had reached $21,600,000, or 16½% on the taxable real estate, and yet the treasury was depleted and the council clamoring for authorization to negotiate fresh loans of several millions. Despite the protests of the Board of Trade, the Chambre de Commerce, and the citizens generally, and despite the fearless attacks of the non-partizan press, the council would not pause in its course of reckless extravagance; each censured alderman confident of finding means to appease a vengeful electorate when the time should again arrive for him to appear before his constituents. "We have been thus attacked before and yet been re-elected: the same power is still at our backs and can elect us again." So argued the condemned aldermen. But election day came and went, and, out of twenty-one who defied public protest in the electric lighting contract, nine only remained. Montreal's civic government is as yet by no means spotless, but few among the citizens are unwilling to admit that the strength of the "ring" is broken, and that an honest minority holds to-day the balance of power, with every reason for believing that another election will see that minority converted into a majority.

To give an account of the way in which this change was brought about is, in the main, to give the history and describe the methods of the Volunteer Electoral League of the city of Montreal.

On a winter evening, three years ago, the members of a social club were informally discussing the influence of money in politics. It was very generally admitted that corruption and a plentiful fund for election expenses were synonymous terms. There were several politicians of experience present, and being among friends, they felt free to reveal what are usually held as state secrets. Many were the tales of successful electoral corruption, and the verdict unhesitatingly rendered by those who know was, in effect, that fraud in the preparation of the voters' lists, and personation (that is, one man voting on the name of another) were responsible for the election of many, if not all, of those who corruptly administered Montreal's public affairs.* Among the listeners were a few earnest young men, who determined to test the truth of these statements, and make at least one honest effort to find a remedy. An extended inquiry was made. It was found that frequently 15% of the vote polled was fraudulent, and that where the majority was narrow, this fraudulent vote always elected the more unworthy candidate. There was law enough, but no one seemed willing to undertake its enforcement. The general belief appeared to be that the only way to elect good men was to fight the devil with his own fire. But it was evident to the would-be-reformers that just so long as corruption was necessary to elect candidates, upright men would

* There is not in Canada, as in the United States, a system of personal registration, excepting the system only to be applied to two cities this year, recently adopted by the Legislature of Ontario. When the assessors make their rounds, they inscribe upon their blotters the names of the tenants or proprieters of the properties assessed. Such parties as, prior to Dec. 1st, pay their taxes are entitled to be entered in the municipal voters' list for the coming year. This list may be examined as soon as completed, and is subject to change at the hands of the Board of Revisors. This word of explanation is necessary in order that what follows may be intelligible.

not offer themselves, and honorable workers would not take part in the election. It was necessary to devise some means by which honest men could be elected by honorable means, or else to surrender the entire business of municipal politics to the unscrupulous element of the community. To this end, the young men made the following experiment. A parliamentary election was close at hand, and selecting a candidate whose character was good, they offered to man and operate, free of expense, the two worst polls in his constituency. Their offer was accepted, and the experimenters were given full control. The two lists comprised about 400 names. A portion of these were merchants, but the great majority were of the poorest and most ignorant class. Thirty-five fraudulent votes had been polled in this locality in a previous election, and the people of the district fully expected to maintain their reputation. The first step on the part of the would-be-reformers was to devise printed cards as follows:

District No . . Poll No . . Voter No . .
Name . . . .
Registered Residence . . . .
(If removed) . . . .
Qualification . . . .
Occupation . . . .
Height . . . .
Build . . . .
Complexion . . . .
Whiskers . . . .
Color of Eyes . . . .
Age . . . .
Peculiarities . . . .
Inside.

District No . . Poll No . . Voter No . .
Name . . . .
Business address . . . .
When to be called for . . . .
Sentiments . . . .
Outside.

There was one of these cards to correspond with each elector. The heading was filled in from the voters' lists: the description was obtained by personal visitation. For four weeks, every night was spent in looking up these voters and obtaining the required data, but the work was done thoroughly, and when election day arrived, not even the prefect of the Paris police could identify his people better. At each poll sat the watcher with his pack of description cards, and no man polled his vote unless the watcher was satisfied. Six attempts to pass the watchers were made, and when it became evident that further attempts were not only useless, but extremely dangerous, these efforts ceased. This system, with slight modifications, has now been in use in Montreal for three years, and has proved effective when applied on a scale much more extensive than in the case of its first application.

Encouraged by their unqualified success, the young men determined to form an independent organization, and on April 1st, 1892, the first constitution of the Volunteer Electoral League was promulgated. The objects, as therein set forth, are as follows:—

1. To revise and perfect the voters' lists.
2. To encourage the nomination of candidates of known integrity for public office.
3. To use all *legitimate* means to secure their return.
4. To prevent fraudulent and dishonest practices in elections.
5. To cause to be followed up and prosecuted, to the full extent of the law, those detected in any violation of the Election Act.
6. To suggest and promote any legislation, approved by the League, having for its object the purity of elections.

It was also clearly stated that the organization should be purely non-political, its members believing that civic affairs should be wholly divorced from national issues: that it should not aspire to become a nominating body, this function being left to municipal organizations composed of older men; that possible aspirants for municipal honors, and officers of political clubs, should be excluded from membership: that its funds should be raised by subscription among citizens, no donation to be received from any civic official, representative or candidate; that the services of every member should be voluntary, and the or-

ganization absolutely independent, even of the candidates which it had selected, the organization being equally ready to unseat, as to elect, in case the candidate proved unworthy of trust. Matters relative to the general policy were to be determined by a council composed of three representatives from each ward organization, while those which related solely to a single ward were to be left to the ward council, the minority, however, always having the right of appeal to the central body. This, in brief, constituted the platform of principles as laid down by the Volunteer Electoral League at its inception.

By the close of the year 1892, the League had grown sufficiently in numbers to warrant it in undertaking the management of the election for an entire ward. Selecting a division in which the contest lay between the sitting member, notorious for his connection with unsavory contracts, and a business man of recognized ability and sterling integrity, who would have nothing to do with corrupt practices, the League endorsed the latter candidate. So vigorously was the campaign conducted, that, five days before the date set for the election, the objectionable alderman gave up the contest as hopeless, his retirement returning by acclamation the candidate of the League.

Relieved from further responsibility in the ward of their original choice, the force was now transferred to what is considered the most corrupt ward of the city, and four days before the election, the work of identification was there begun. It was a large ward and the time was short, but 1068 voters, equivalent to about one-third of the vote of the ward, were identified: five polls were manned, and on election day thirty-three attempts at personation were prevented. In the remainder of the ward the unprotected polls were at the mercy of the fraudulent voter, and the contrast thus exhibited was startling. The candidate of the League was defeated by thirty-four votes had the entire ward been watched by the League, his majority would have been considerable. This time the system had been given a wider trial and had not been found wanting. The public eye was upon it, and the public purse was now open to its call. The workers had gained experience of value, and the veterans of this year were ready to become the commanders of the next.

Many defects in the statutes regarding election matters had by this time become apparent, and when in the fall of 1893 the Provincial Legislature was assembled at Quebec, a number of carefully prepared amendments were presented by the representatives of the League. These measures provided for the municipal disfranchisement of mere boarders and lodgers: for compelling the assessors to strike from the voters' lists the names of dead men and minors: for the appointment, after the current year, of an impartial Board of Revisors free from aldermanic control: for a minimum fine of $100 for each detected case of personation: and for two constables at the door of every poll to preserve order and immediately arrest any person violating the election act. All these provisions, in due course, became law, and in the hands of the League have proven most efficient weapons.

Once more a civic contest drew near, and the League prepared to combat election fraud on still more extended lines. Five wards were now undertaken. Hitherto, it had been sufficient to watch the ballot box and ensure the proper casting of the vote as registered: now it was determined to investigate the composition of the registry lists while there should yet be time, according to the law, to make objection. Previously the League had been compelled to fight upon the ground chosen by the enemy: now the field should be of its own selection. A citizens' fund of somewhat over four thousand dollars was collected, for

the work undertaken was now too large to be covered by volunteer effort, and the task of identification required skilled men, able to devote to it their entire attention. An office, with paid secretary and canvassing staff, was established for each ward. Voters' lists were obtained, identification cards prepared, and the canvassers sent forth with instructions to secure accurate descriptions of the *bona fide* voters and full data regarding cases where the right to vote could be questioned.

The civic elections in Montreal are held on Feb. 1st. Nomination takes place on January 20th, after which date no changes can be made in the voters' list. The Board of Revisors meet on January 5th, and from that date until nomination consider objections and make additions to the list. According to law, no name can be taken from or added to the roll by the Revisors, unless written notice has been given not later than January 4th. Usually the work of the Revisors has been a sinecure. They have held a few sittings, added several names, and, as a mere matter of form, certified the lists when presented. But when the Board met on January 5th, 1894, they found that the Electoral League had prepared sufficient work to occupy them at every possible sitting until the date of the nominations.

The canvass of fifteen thousand electors had been nearly completed by the League's identifiers, and many and astonishing had been the discoveries. Over six hundred persons were found to have been incorrectly inscribed, through carelessness or inefficiency on the part of the civic officials; thus, Hy. J. Head was entered Hy. J. Mead; B. Radford appeared as B. Bradford, and John Craig was found to be John McCuaig. Had any of these parties applied for a ballot under this mutilated title it is more than probable that he would have been denied his vote. To each of these parties, thus incorrectly entered, a notification of the error was sent, together with instructions as to the manner in which the Revisors should be communicated with in order to rectify the error.

It was further found that some four hundred permanent non-residents were entered as entitled to vote. That they did not and could not vote was evident. That they were frequently voted for was an inference most admissible. No law, however, existed under which these names could be expunged. It was only possible to so mark the names upon the list that the vote could not be accepted at the poll.

But besides incorrect names and the names of non-residents, were the names of seven hundred and twenty-three persons whose right to be upon the list at all was seriously in question. These names the League, through its attorney, notified the board of Revisors it would challenge. Of this number, two hundred and eight names were those of deceased persons. When they came up for consideration it was not sufficient for the League to establish a reasonable doubt; the Board of Revisors insisted that they were required to institute no inquiry. "The names were there, and unless indisputable evidence could be produced, there the names should remain." But the Board found the proof prepared, and for nearly every name a certificate of decease, duly signed by a relation and the attending physician, was produced, and it was only where a party had been so long dead that no relation or friend could be found thus to sign, that the worthy Revisors were able to rule that the name must still stand.

Next were considered the minors. The names of forty-seven children, heirs to estates, had been discovered, although no one is by law entitled to vote under the age of twenty-one. Again, certified evidence was demanded and again produced. But there were some instances where, though minority was admitted, the parents or guardians had refused to sign a writing to that effect; in such cases the worthy Revisors left the names

upon the list. Then, according to the city charter, employés of the corporation are disfranchised, but there were two hundred and ten such names found entered upon the roll of four wards. When visited by the canvasser, the civic employé invariably said, "Why call on me? I have no vote." He knew the law and observed it: but the name left on the list was a constant temptation to the personator. In their contention to have these names removed the League representatives were not altogether successful: but they did secure the marking of the names so that the vote could not be polled by proxy. Still another evidence of gross carelessness was brought to light. Although a person may own several properties in the same ward he is entitled to but one vote in that ward, but nearly three hundred persons where found to be twice entered. These names, after prolonged argument, were removed.

But there were many unclassified iniquities revealed in those voters' lists. In one instance, a cigar manufacturer, a poultry merchant, and a marble cutter were purported to have rented the same tenement yard for "storage purposes," and yet even the landlord, himself an alderman, was not certain that any of the supposed lessees had ever used the property. Eleven names were found registered as tenants of one hotel saloon. Two were the rightful lessees and one was the proprietor, but the remaining eight were either employés or friends of the tenants. It was claimed that as business partners all were entitled to registration, yet it came out in evidence that the only agreement existing between them was that, in addition to wages, the bar tenders should receive five per cent. of the profits. Worst of all, a number of names were found on the voters' list that were not on the assessment roll, no taxes having been paid by these parties, and the only explanation the department could give was that these names must have been added, by parties unknown, after the books had left the assessors' hands.

The Board of Revisors did not do their duty by all the complaints. How could they be expected to, when they were themselves aldermen on the verge of an election? Still there was much gained by the exposures. In the two largest wards the lists were found to contain, when the *enquete* was concluded, five hundred and eighty less names than in the previous year, though a natural growth of population had continued. Public sentiment had been aroused, and by legal enactment the pernicious system of appointing aldermen to revise the lists that their own allies had tampered with, came to an end. Hereafter a Judge of the Superior court will appoint the Board of Revisors.

With the lists tolerably purged and the identification material ready, the next problem before the League was how to raise a sufficient *volunteer* force of trustworthy men to operate on election day the polls in five wards.

In nearly every civic community the good element *plus* the indifferent outnumbers the bad. In order to win an election, it is necessary to find a sufficient number of men not only to watch the polls and thus checkmate the enemy, but also to bring to the polls every careless voter who, if he voted at all, would vote right. The members of the League set forth, therefore, to preach a crusade among the young men of the city from the text which is their mottto: "Every man is individually responsible for just so much evil as his efforts might prevent." The plan of campaign was to enter a given ward, call together a few of its representative and respected older citizens, lay upon them the need of reform and ask their co-operation. In a French ward, this group would be French, in an Irish ward, Irish, and in an English ward, English. It would be the men of the ward, and thus all criticism of outside interference would be disarmed at the outset. From this

nucleus a select body was formed. It was then created a branch of the League. Officers were elected and the policy of the ward organization was left in their hands. When candidates appeared, the most worthy was offered the League's independent support, but only upon receipt of satisfactory written assurance that his election would be conducted strictly according to law. A public ratification meeting was then called. Personal notification was sent to the best men of the ward, irrespective of nationality, politics or religious belief. The young men especially were appealed to. Here the independent press joined in, like an auxiliary naval force following a land army. When this meeting was held, stirring speeches were delivered, and everything was done to arouse the electorate and enlist recruits for the work of election day. This policy, pursued in each ward, gathered a force of three hundred and fifty-four volunteers, ready for whatever work they might be called upon to do. This force was then divided and subdivided. Each man was trained for his particular duties and given printed instructions by which to refresh his memory. By election day many of the League's recent recruits understood the election law better than some of the deputy returning officers in charge of the polls. The same course of instruction having been given to all, a force was easily transferable at short notice from one ward to another, so that in case any objectionable contestant retired, reinforcements were immediately released for other fields.

As the first of February drew near, public sentiment became awakened. It was admitted that now or never a successful stand could be made against the "ward boss" and his corrupt "machine." Better candidates than usual were induced to take the field, and as the lines became clearly defined, the League made its selection. Not all the former aldermen deserved eviction, but they usually clung to their positions in inverse ratio to their desirability. In all, the League supported eight men; of these three were sitting members deserving re-election, and five were new men. Opposed to these were aspirants considered wholly objectionable. The result of the contest can be summed up in a word. Three of the aldermen objected to retired before election, four were beaten at the polls and one retained his seat by a narrow majority of seventy-three. Out of eleven thousand one hundred votes cast, less than one-fifth of one per cent. was fraudulent, though determined and repeated attempts were made to bribe, bully and bulldoze the League watchers. Throughout the entire campaign none but lawful methods had been employed, and it was conclusively proven that illegal practices are not necessary to elect honorable men.

The method employed for bringing to the polls the indifferent voter has been borrowed largely from the "machine." How it operates can best be illustrated by the detailed account of a particular contest. For several years a certain ward had been notoriously misrepresented. It had come to be considered a pocket borough by a certain clique. Not that it did not contain a well-intentioned electoral majority, but this majority was unorganized and discouraged, while the clique had a thorough organization and no stint of contractors' money. The ward's representative it was believed had been directly interested in nearly every scandalous measure that a very objectionable council had adopted. Against him, as David before Goliath, was pitted a young and comparatively unknown man, for whom little could as yet be claimed beyond an honorable name, a clean character and moderate ability. The latter candidate the League accepted, and with him undertook to dislodge so formidable and well-entrenched a rival. An identification canvass of the ward had already been made, and the guarantee of

at least an honest election secured. A second canvass was now made to ascertain the sentiments of each elector respecting the two candidates, the voter's address during business hours, and the time most convenient for him to vote. The ward was divided into districts of five polls each.

Each district had a committee room where all information pertaining to the five polls was collected. In each committee room were five large cardboard sheets (tableaux), placed upon separate tables, each sheet containing the names, alphabetically arranged, of persons entitled to vote at a given poll. A colored mark before the name denoted the elector's sentiments, that is, whether he was favorable or otherwise to the League's candidate, while, after the name, was entered the business address. To each sheet were assigned on election day, two men—a "receiver" and a "despatcher,"—whose duties will be presently defined. At every poll was a team of three men, two of whom were inside watchers or "scrutineers." Every elector, upon presenting himself, was carefully inspected, and, if failing to correspond with his identification card, was sworn. Few dared to swear falsely, but where they did thus swear the watchers were prepared to fill up warrants and secure the instant arrest of the personators. Outside the poll stood the third representative of the League. In his hand was a packet of card stubs (see form marked *outside*), one for each elector, with name and sentiments, but no description. Those favorable were on white stubs; those considered otherwise were on red. As each voter entered the booth and his identity was ascertained, the outside man withdrew from his pack the corresponding ticket. Every half hour a runner from the district committee room collected the "voted" card-stubs and delivered them to the "receiver," who promptly lined off the names from his "tableau." At the door of the committee room were a number of sleighs, loaned for the day by well-wishers of the cause. Opposite the "receiver" sat the "despatcher." It was his constant duty to copy off several unvoted names, with addresses, upon a slip, and despatch a sleigh to bring up the voters from the business addresses indicated. This system, steadily and quietly worked from 9 a.m. to 5 p.m., resulted in the polling of the largest vote ever cast in a municipal contest, and the return of the League's candidate by a majority of 655.

Montreal is singularly fortunate in having for the most part a disinterested and independent press. In any campaign for better things, the most influential newspapers may be depended upon to sink political distinctions and endorse worthy men. The partizan press of the city, however, were chary of giving much endorsement to the work of the League, not knowing just what effect this ignoring of political beliefs for personal fitness might have on coming national campaigns; but the following appeared in the best known party paper, the day after the election: "The machine politicians thought they knew all that was worth knowing about election work, but the V. E. L. can give them a few pointers." Editorials next appeared in the party organs in unqualified praise of the League and its work. Here was a recognized force that must be conciliated. The League as a body will not enter national politics, but its influence will. It is hardly probable that at the approaching national elections, either party will care to run the risk, by objectionable nominations, of alienating from its ranks a strong volunteer force that can be depended upon to lift not a finger for a corrupt nominee, but which cannot be relied upon, even to remain neutral, if the party usually opposed brings forward exceptionally fine men. Honest civic elections make for honest national campaigns.

The methods employed and the results attained in Montreal are possible, *mutatis mutandis*, in any city on the

American continent. There is ample call and room for municipal reform organizations on many lines. Good government clubs can do much towards exposing administrative unfaithfulness, arousing public sentiment, securing better legislation and inducing worthy men to present themselves for municipal offices; but unless such efforts can be supplemented by other organizations recognizing the necessity of the inviolableness of the ballot box and prepared to spend and be spent in active hand to hand conflict with the "machine," on its own battle ground, the triumph of righteousness and good government, which we all so desire to see, will be long delayed. Few are the cities on the American continent, in which there does not exist a sufficient number of patriotic citizens to amply endow any working organization that can be trusted: in which there are not enough sincere, enthusiastic, determined young men, from whom to recruit an electoral league to full fighting strength: in which a lawful registry list, an honestly polled ballot and a gathering in of the indifferent vote will not bring about the triumph at the polls of any just cause.

A GREEK REVERIE.

OFF NEWPORT.

This is the purple sea of ancient song.
These are the groves to which Bacchantes lured.
And in these rocks bad spirits are immured,
Pent in by Heaven in token of a wrong.

Sure that is Pan, who marches through the pine,
Followed by boys with passionate eyes, and men
Bedecked with roses! Fainter down the glen
Tramps the mad rabble, caught with song divine.

Now once again the Lord of Life and Day
Smites with his splendor all the dull, waste waves.
Straight Ulysses, his face, sleep-swoln, laves,
Rouses his Heroes, and with scant delay
Prows are turned homeward. Hark the rythmic beat!
Another weary day, and vacant sky, and heat.

GERMANTOWN, PHILADELPHIA. JAMES COBOURG HODGINS.

A JAPANESE VIEW OF JAPAN.

BY K. T. TAKAHASHI.

"IN the quietude of an isolated Isle she grew up to be a fair maiden, unknown to the world. Time came, however, when they found and forced her out into society. They worship her now. But she is a heathen, and Christians knew, long before, that she could not be good. God bless Christians! what man, what woman, what nation, can be faultless—perfect? This maiden has, indeed, an abundance of shortcomings. But with the learned, as well as with the fastidious, it has become a fashion to rival in discovering such excellent qualities as a long-continued peace and unsophisticated modesty of human nature have developed in her, although many who are so wise as to force events, learned that in no remote future this amiable damsel, too, will outdo herself, and become a virtueless coquette." These are the lines which occurred in my reading some time since. They recur to me with strange fitness as I sit thinking about Japan.

I have just finished reading an article with the quaint title of "The Japanese Smile," by Lofcadio Hearn, which appeared some months ago in *The Atlantic Monthly*. Following the bent of the day, Mr. Hearn takes it upon himself to make such a whimsical topic the subject of an elaborate discourse, discovering in the national trait a cause for commendation rather than condemnation. This is entirely kind of Mr. Hearn, and I shall have nothing to find fault with in him, especially as he has done well what he had proposed to do. Besides, I am a Japanese myself, and nothing is more agreeable to me than to hear foreigners speak approvingly of my country.

But there is another side to Mr. Hearn's essay, probably not intended by him, and it is that the article sums up the reasons why, on the one hand, friendly foreigners admire Japan, and on the other hand, at the same time, why they raise their warning fingers. For attractions may be many and various in Japan; but it is essentially the joyful atmosphere that envelopes her whole existence which enchants foreigners. And it is this joyful atmosphere, native and natural, which Mr. Hearn expands upon in his article. But when he expresses his anxiety that Japan, if left to herself, will come to lose all her charming peculiarities, and contract the odious practice of smiling to hide,—to hide cold irony, evil secrets, the heart of a hypocrite: to hide all that degrades mankind to deviltry,—and, still worse, perhaps, of grunting instead of smiling, Mr. Hearn is again voicing the sentiments of many an Occidental. So that his essay is, after all, an ingenious summary of the current western opinion upon Japan. That opinion is an unhappy one from my point of view.

It is said that it was the United States, and then England, that entreated, pleaded, nay, forced upon Japan, the opening up of her ports and harbors: that they introduced civilization into Japan, and that the gates once opened, the noontide of the 19th century surged in, in an appalling manner, at least to the eyes of outsiders. But our good foreigners are, almost in the same breath, preaching forbearance and conservatism to Japan. Do they know that out of one hundred foreign visitors to Japan, seventy-five are, I may be allowed to say, pleasure-seekers, who are only too apt to indulge in vagaries unworthy of home and relatives; and twenty-four are commercial Christians, whose Christianity is consistent only with

their simple motto, "Heathens have no rights;" while the remaining *one* is that good missionary, just out of a college cradle, who, instead of looking after those globe-trotting sinners of his own race, is destined, as soon as he reaches Japan, to write home reports of "divine graces," and other merciful things, among every-day people to whom salvation is precisely as good, whether it proceeds from Christ or Buddha, or Mahomet for that matter, so long as it promises to be of fairly good quality.

Under such circumstances, how can Japan—poor helpless heathendom—be expected to successfully avoid contamination with undesirable foreign elements? It is about time an international league were organized, having in view the prevention of the national demoralization of Japan. But let good foreigners remember that in this wide, wide, world there is no maiden but knows the value of that individuality which in woman is chastity, and also the power of modest grace Japan is neither a mere maiden nor a rash youth. She has her twenty-five centuries of unbroken independence and undefiled individuality to cherish for ever with fondness and pride: to look back to for inspiration and aspiration.

The world knows what radical changes Japan has undergone since the downfall of her feudalism; has she grown less sincere in her smiles, less frequent in her mirth, in these thirty years? The world still regards her as the most hospitable and pleasant nation on earth, and the more so, the more she becomes known.

It is true Mr. Hearn is not the first foreigner who has observed the fact that the most hopeless personage,—unlovely at the least,—any man can meet in Japan, is he who craves after, imitates and worships everything that is European or American. But Mr. Hearn, as well as the others, knows that such a one is only exceptional; for Japan on the whole is still Japanese. The question is whether that exception will ever become general or not. Now, in spite of their Anglomaniacs, the people of the United States will never become English. Nor will the prevalence of studying German ever make England German. But what nation is there that does not count among her millions some persons addicted to undue worship of foreign manners and ways. This mania is so constant a quantity in every land that nobody cares to take notice of it. If, however, the good friends of Japan mean to say that because Japan is neither England nor America, but a mere Pagan Empire, the latter should not be presumed to possess sense enough to preserve her national individuality, all I can say is that the judgment is extremely occidental. Japan will ever be ready to sacrifice her egotism for the sake of her individuality; but I am afraid that those kindly foreigners, who are wailing over the supposed coming fate of Japan, will never come to appreciate the distinction which I here make between egotism and individuality.

The next argument invented to humiliate Japan runs thus: "Japan, in her wild ambition to attain the level of the all-sided civilization of the white race, has blindly plunged herself into a task which is beyond her mental capacity, which for that reason can only make her more and more discontented, morose and phlegmatic, and which in the end can only bring about her total wreck." But this is begging the question. It assumes that Japan is a nation of untractable epicureans, upon whom the varied experiences of twenty-five hundred years had but been wasted like a dream in a night of debauchery, and so unnerved them, that any attempt on their part to grapple with occidental ideas, and white men's discoveries and inventions, would burst their poor, aching heads in twain. I grant the assumption is quite excusable, as coming from men to many of whom it is a matter of

conviction that heathens are the beings doomed to hell-fire after death, and who, while in life, can do naught but tell lies. Do the men of white skin remember how long ago it was that they themselves came to utilize the hidden powers of nature? It was only as yesterday; but since that yesterday what marvellous changes have overtaken them as well as the world at large. And these changes, were they in any way less sudden, less complete, less wonderful, than what have been taking place in Japan? I love and honor Japan as my motherland, but I should not hesitate to say that, rationally speaking, she has nothing to be proud of or made much about, however great have been her recent changes. Why are our brothers of the west surprised at Japan's progress—unless they consider the Japanese an inferior race? Why are men of white skin so proud that they must look down upon their brothers of different climes, and insult them by excessive praising? Whatever the Japanese have achieved in recent years is nothing more, and is probably a great deal less, than what the Europeans and Americans have achieved in that yesterday. Nay, in this world of cosmic evolution, we are too humble to know what we have done. But the world is still progressing, and Japan, in order to keep her place in the comity of nations, must also keep up her pace. It is really unreasonable, if not extremely mean, to try to persuade Japan to remain her former self forever.

But the good friends of Japan still insist: "The numerous problems which are confronting the occidental nations are so ominous and grave, that they are likely to drive forever the lights of mirth and laughter from the face of their after generations. It will be, therefore, unwise, nay madness, for Japan to plunge out only to be disfigured in this coming disaster." In short, our kindly friends say to us: "You are such a pleasant lot of people, always smiling, always bowing, and doing things so prettily and nimbly, that we would always like to have you by to please us in our moments of leisure. So don't think; don't knit your brows; we will do all that for you. But be always smiling, bowing!" Tut, tut; the Japanese have little ambition to enlist themselves for circus clowns. Besides, the clowns have to do the hardest thinking in the world.

Well, this way of arguing is unpleasant at the best. It is hoped, however, that the reader has already seen that the points discussed have hardly justified any other treatment, Yet it will be ingratitude to dismiss in this manner the well-meant praises and warnings of the well-wishing friends. Let me add a few words of explanation.

It is singular that those writers and others who regard the momentousness of the occidental problems, in all their profoundness should invariably evince such pathetic childishness, whenever they talk or write about Japan, that we are almost compelled to doubt the serious nature of those questions. With them our recent changes are no more, nor no less, than a mere outcome of a mimicking faculty abnormally developed. I can well sympathize with their shuddering anxiety when I understand that they know no other ground upon which the changes of Japan rest. Yet, on the face of it, it is absurd to think that a community of men and women, with dignity enough to be called a nation, could explain itself, its different phases, its various ups and downs, merely upon such a principle. It was only the other day that the gossips of the world were talking with serious apprehensions about the fearful criminalities of many leading Frenchmen; but all is over and well now. The stability and individuality of a nation, with its experience and time-grounded wisdom, is hardly a fit subject to prattle about. "But it is a poor hand that points to France for an example of the stability

of a nation," a voice would say. I pity the man who persuades himself to believe that a few admonitory words could have saved France from relinquishing its resplendent days of Louis XIV., which to us, at this distance of time, seem sufficiently romantic, picturesque, and refreshing, and the fact of their being gone forever, appears even regretful.

But to come back to Japan. In looking back to the event of twenty-seven years ago which consummated, as by one stroke, Restoration, Reformation and Revolution, does not its very magnitude alone suggest that a mere national aptitude for mimicking could not have been its sole cause?

These are the reasons for the event: 1—Japan could not have avoided the changes; 2—and those changes could not but have been radical, 3—and also progressive.

Let us briefly go over these reasons. As a matter of fact, Tokugawa Shogunate had given Japan a peace and rest of over two hundred years, an unusually long period of prosperity for feudalism, which could not but be a temporary form of government, from a sociological point of view.

Now it will be extremely difficult for Americans to realize in imagination feudalism as it was, but if they can exercise their patience, and deny, for the time being, the existence of one Grover Cleveland, and suppose that fifty years hence Tammanyism has become the governing principle of the mighty Republic, then they would have a somewhat true idea of the past feudal system of Japan, for the latter, in time of peace, was only a little better than that felonious tigerism.

Baneful as feudalism was, Japan endured its evils patiently, more than anything else out of a sense of gratitude towards the Tokugawa family, who in the beginning had brought to her the much desired peace after a long period of war and misery. And in those days literature and art, such as would please the rich and leisure some, had indeed kept on advancing, but the time-honored national motto, "Government is for the people," had gradually been lost sight of, in the midst of such absurdities as Kirisute-gomen, or pardonable killing, which, with many other atrocities, grew up into a right by which a Samurai could butcher common people with impunity for almost any act, even an act of mere discourtesy.

Thus towards its closing days, in spite of its courtly manners, refined tastes, and flourishing arts, such as a church would affect in the most hypocritical period of its history, feudalism had gone down into the abyss of degradation. A change had become necessary for Japan. Nor were lacking men of learning, thought and patriotism, who studied, planned and paved the way to such an end.

But it was evident to these men that the desired change, in order to bring about the desired results, should be not less than the total overthrow of feudalism, and the introduction of a new order of things, and therefore a radical change. Of course each man had his own views, but all were disgusted with the then existing state of things, which led to laxity of morals, and, among and above all other results, enslaved the people. They all agreed that the change must be prompt, and thorough, and strike to the root of feudalism, which had grown up to be a system of oppression and corruption. Here then was the reason why the changes could not but have been radical.

Perhaps it may be urged that those who had actually most to do in effecting the downfall of the Tokugawa Shogunate had, many of them, a secret design in their own minds to instate themselves in the position thus vacated, and continue feudalism according to their own fashion. But the events that followed proved that the real cause was other than such individual ambition, that the change was a case of evolution, or

(should I say ?) the course of nature, or rather the effect of the long suppressed desire, of the country at large, utilizing the selfish action of a few men for its own purpose. So the change was effected. Now it was the very nature of the new *régime* thus brought about to determine which course it would follow.

The Damio-hood and Samurai-hood abolished, the Japanese, with the hitherto recognized distinctions of ranks and privileges no longer existent, stood for the first time on equal terms of manhood. Naturally the Kuazoku and Shizoku, or the Damio and Samurai of former days, readily saw that it was now the era of personal merit, not of inheritance, and that they must exert themselves accordingly, while the Heimin, or the former unprivileged class, seeing the new field for honor and aspiration wide open before them, lost no time in adapting themselves to the privileges of newly liberated souls. To add to this, the doors of the western world had just opened on fresh ideas and thoughts. Thus the change that followed could not but be progressive.

Brief and incomplete as these remarks are, I hope they will sufficiently show how utterly ludicrous is the idea that Japanese progress is a mere flower of curiosity, and may to-morrow fall off in a gust of wind. All progress, as the term is now understood, is essentially democratic, but Japan, without the democratic condition which she has so far attained, could not have achieved her recent progress. That democratic condition was not, however, the outcome of mimicry, but the necessary consequence of the radical change which in course of her national existence Japan could not have avoided. It is true that the fact of foreign intercourse, beginning at the time it did, to a greater or less extent had an influence in determining somewhat the manner of her progress, and possibly, also, in leading the change that was coming over her to be more democratic than otherwise in its tendencies. And it is quite natural that this should have been so, for intellectually and materially, no nation or generation has alone scaled the height of civilization the Occidentals of this century have attained. But it will be unjust to deny to Japan the purely national impulse which brought about and determined the courses of her own changes. In other words, the Japanese progress could not have been a mere accident, nor a miracle of mimicry. It was an unavoidable step in a national evolution.

We have now a firm ground to stand upon and discuss the future of Japan. But I have tried the patience of the reader already to a painful degree, and I must stop. Besides, the subject to be of much value must be dealt with from a sociological, or rather scientific, point of view, and would require deeper learning and an abler hand than mine.

FOOT DISTORTION IN CHINA.

BY G. ARCHIE STOCKWELL, M.D.

IN no part of the universe, save in an exclusive corner of the Chinese empire, is the beauty of the female "form divine" so jeopardized. Elsewhere, heads may be flattened and elongated, noses skewered, ears pierced, lips made pendulous, busts obliterated or abnormally developed, teeth and skin rendered hideous by stains and dyes, but the feet, those indispensables to the grace and comeliness of the sex, are inviolable. To the Caucasian, a neatly turned ankle, full and rounding calf, terminating a well-tapered leg and swelling thigh, are manifestations of perfect loveliness. But the Celestial, loathing the springing, half-gliding, undulating movement of the daughters of the Occident, finds no beauty in woman's "understanding," save when artificially provided with broomstick legs, clump feet, and a hobbling gait, most suggestive of the cloven pedals of the sable Asmodeus.

What caprice ever gave rise to so infamous and barbarous a custom, is a mystery, since even the Celestials themselvesare at a loss for explanation, and take refuge in traditions that for the most part are vague and contradictory, and often wholly irrelevant. The great Confucius, who descants with wearying solemnity and prolixity upon the minor details of life, here is wholly silent; and other classic authors of the flowery kingdom are equally remiss; but some of the minor writers affect to believe the custom antedates the Imperial Tsins, declaring the records were lost in the universal destruction of literature that marked the reign of this vandal dynasty (B.C. 248 to 206).

Turning to traditions, it is found that the one obtaining most popularity and greatest credence, evolves the custom from one Tanké, an infamous Empress of the twelfth century before our era, who is reported to have combined the beauty of a Cleopatra, the wisdom of a Semiramis, and the morals of a Messalina. Born with deformed feet, her personal graces were such as to raise her to the proud position of Emperor's consort. All men became her devoted slaves and admirers; yet, throughout life, from her thirteenth year upwards, she deserved her reputation as infamous. Exquisitely sensitive, however, regarding the physical imperfection that courted the adverse criticisms of her own sex, she cajoled her imperial lord, who to her was "as clay in the hands of the potter," into issuing a decree that defined clump feet and shapeless legs as models of elegance, and, further, required them to be perpetuated in all females of seven years and under who, by birth, would be entitled to the privilege of the Court.

Another tradition comes from the Province of Kwang-Tung (Canton) and the south-eastern portions of the Empire, and refers to the misfortunes of one Pwang, a favorite concubine of the Emperor Yang-te, of the Suy Dynasty, who reigned in the last part of the sixth or early portion of the seventh century. Consigned to the Emperor's harem in early childhood, and a constant sufferer from bromidrosis, the attendants of the poor creature, in order to render her presence more tolerable to her master, were wont to daily swathe her feet in bandages, and to place in her shoes powdered spices and aromatics that, as she walked, sifted through openings in the soles communicating with the imperial stamp therein, thus leaving with every step the perfumed imprint of a yellow

lotus. From this is derived the Celestial form of flattery: "Your step procures the golden lotus," with which the gentlemen of Kwang-Tung and Fuh-kien are wont to tickle the ears of maidens possessed of phenomenally small pedal extremities. This procedure failing to wholly alleviate, by the advice of the court physician, the bandages were drawn more tightly each day, a remedial measure successful only at the expense of limb contour and development.

As the writer may state from experience there, deformed feet are by no means so fashionable, even in China, as the world is wont to infer from the tales of missionaries and travellers, who, for personal reasons, deal largely with the morbid and wonderful, and not always (I regret to say) with the strictest regard for truth and accuracy.

In many Provinces, the small foot is almost as much a novelty as it would be in Ontario or New York, and in Tartar and Mongol districts, Southern Manchou excepted, has never been tolerated. During the Ming Dynasty, the custom received a blow from which it has never fully recovered, and it was then forbidden on pain of death. Ever since, the custom has been slowly on the wane, and it is now forbidden within the precincts of the Emperor's Court. The "Son of Heaven," as his Imperial Majesty is termed, will have none of it, and his harem is made up exclusively of females possessed of normal feet. Even in Kwang-tung, where the custom prevails, it is possible for one to reside for months without encountering a small-footed female, unless especially brought into contact therewith, as in the home of some medium-class official. "Conspicuous chiefly by its absence" in higher circles, it is emphatically a badge of the middle class; though, every high rank mandarin usually aims to possess one small-footed wife or concubine, on the same principle, doubtless, that led ancient conquerors to drag captives at their chariot wheels.

The distortion is not, as commonly surmised, commenced in infancy, but reserved for the period embraced by the sixth and tenth years. Experience has taught the fallacy of meddling with bones and tissues until they have attained a certain degree of firmness and consistency; if soft, they are too readily yielding for plasticity, and do not take kindly to the bruising and squeezing that accompany the act of moulding: if too hard, the operation is inclined to result in frightful ulceration and gangrene, and, even barring this, the result is not satisfactory. In fact, under the most favorable circumstances, the result is attended with great risk, owing to the inflammatory and absorptive processes set up, whereby the general circulation is made a channel for the elimination of effete and decomposed products.

Glancing for a moment at the relations of the feet, we find that during the first ten years of life, no portion of the human frame undergoes greater changes. In the adult, each perfect foot has the form of an arch-convex above and concave beneath, the highest point being the bone known as the ankle-bone, which constitutes the pedestal for the support of the leg, and through which the weight of the body is transmitted to the ground by a series of articulations between the heel and toes. It is to be noticed also, that the convex, or superior portion of the foot, is essential to the greatest possible freedom of motion on the part of the leg, and, at the same time, aside from flexibility, permits of normal changes of position on the part of the body, without endangering its centre of gravity. The concavity, from the great number of bones entering into the formation of the sole, insures suppleness and accommodation to irregular surfaces; again, the under portion of the foot possesses two arches, one lateral, the other longitudinal, and when it is brought to the ground, the immediate points of contact are the anterior lower portion of the heel and

anterior inferior portion of the bones immediately behind the toes, whose articulations with the latter form the "ball."

In the infant, the under surface of the foot is flat, and the convexity of the upper surface is largely a matter of conjecture, owing to the abundance of soft tissue provided by Nature, with a view to affording nourishment to the parts: the bones are irregularly and imperfectly developed, cartilaginous in structure, and connected by soft, tissue-like bands that, later in life, will develop into ligaments of great elasticity and power. The support of any material weight is impossible, since, owing to lack of ossification, dependent relations are not established: the soles turned upward and inward now approximate each other: also, the foot is longer and broader, in proportion to its height, than in the adult. With development, however, the anterior portion outstrips the posterior, and straightening is accomplished by the more rapid growth that accrues to the inner border, the changes being brought about chiefly by alteration in the structure of the bones. In the fact that the bone development is seldom complete before the eighth or ninth year, and that the bones themselves are scarcely ever firmly resistant until four or five years later, we find the reason for postponing the moulding and shaping of the foot until infancy shall have been superseded by childhood.

Almost from the moment the little one begins to comprehend speech, she is taught to look forward with expectation to the distortion of her feet. By the completion of the act she is ushered into womanhood, and becomes marriageable, regardless of mental or physical development, or fitness for the duties of maternity. Wives and concubines, who have not reached their eleventh year, are by no means uncommon features in the Celestial harem.

The torture, and it is no less, is instituted amidst relatives and friends especially bidden for the occasion, and to do honor to the feast that follows. In order to render the flesh amenable to the squeezing process, the feet are first submitted to the prolonged action of intensely hot water, and next plentifully dusted with powdered alum to ensure complete contraction of the minute and superficial blood vessels. Then the bandage is applied with all the combined force of two operatives, one of whom is usually a professional: the child meantime being extended upon the couch, and forcibly held by attendants, who do not scruple to stifle the evidences of her suffering with the hand, unless, as sometimes, though rarely, happens, the narcotic powers of opium have been invoked. The bandage employed is a stout, non-elastic band, especially woven for such purpose, some two or two and a half yards long and two inches wide, and is newly wrung out of boiling water at the instant of application.

The four outer (lesser) toes are doubled under and confined to the sole, the intervening space being packed with astringent powder (alum), when the bandage is given a turn to confine it about the point of the heel, and then returned over the top of the foot, and at the point of articulation of the toes. Powerful traction is now made, expression, kneading, and other manual aids being called into requisition, and in a way to crowd the bones of the anterior portion of the foot backward and forward upon those of the instep, which in turn are thus crowded down to meet the heel that, by the same act, has been drawn downward and forward to occupy a position in the same plane with, and perpendicular to, the bones of the leg. Finally, the whole is tightly wound laterally as high as the calf, every effort being made to limit motion and blood supply.

Every four or five days during the first month—after that once in as many weeks—the bandages are loosen-

ed, each removal bringing away considerable quantities of exfoliated cuticle and dead tissue, whereby more or less superficial bleeding is provoked. So, too, there is some ulceration, and not infrequently small patches of gangrene. The hot water bath affords a cursory cleansing; more alum is applied and packed in the creases and raw surfaces, when the bandages are replaced with greater severity and rigor. It is only when the deformity assumes a semi-ovoid, or rather hemiconoid form, of which the great toe is the apex, and the sole the flat surface, that the operation is deemed at all satisfactory. There are fashions even in distorting feet, and various modifications obtain according to locality and district, the most notable, perhaps, being that pertaining to Southern Manchou, where the great toe is also confined to the sole, and an attempt made to secure as nearly as possible a model of the equine hoof—a resemblance that is further aided by the form of boot prescribed.

From two to five years is required to bring the deformity to the acme of Celestial perfection, during which period the little one is positively never for an instant free from excruciating suffering; and the anguish which condemns her to spend alike her waking and sleeping hours in a recumbent position, with legs dangling over the hard edge of the couch—that circulation may be impeded sufficiently to benumb the parts—may better be imagined than described. Never by any accident are the feet permitted to touch the ground, lest the process of moulding be interfered with; and by disuse and lapse of time, the muscles from the knee down become flabby and incapable of responding to efforts of the will. As a sequel to this treatment, we find not only a shapeless leg and ankylosed joints, but also displacement of articular relations of every bone in the foot, those of the great toe, perhaps, excepted, with loss of all natural form and contour. Now it is the *posterior* lower portion of the heel, the *inferior* portion of the bones of the arch, and the *upper* surfaces of the toes that form the sole of the foot. The doubled-under digits ultimately become incorporated beyond recognition with the sole, and the bones throughout the member are coalesced to form one solid, osseous lump, rendered more hideous by scars and cicatrices. Foot and leg resemble nothing so much as a bludgeon with a knobbed head, and they have to the eye the peculiar dead appearance, and to the touch the doughy feel, that always accrues to paralyzed and imperfectly nourished tissues.

During life the bandage is never discontinued once its use is begun. Child, maid, matron, or widow, the wraps supply the demand that is met by hose among the fair ones of western lands. The removal of the bandages, too, is a matter of some hesitation, since re-application demands the services of an expert; hence the "beauty feet" are exposed to the air and action of cleansing fluids as infrequently as is consistent with the texture of their coverings.

OUR VESSEL IN HUDSON STRAITS.

THREE YEARS AMONG THE ESKIMOS.

BY J. W. TYRRELL.

The Eskimo, the most northerly inhabitant of this continent, is in many respects a very strange and most interesting character. Doubtless many of my readers had an opportunity of seeing a party of them who were on exhibition at the World's Fair. The writer, who has just returned with a Canadian Government Expedition from explorations in the north, has lived with and travelled amongst the Eskimos for about three years, and during that time he has become greatly interested in them, and quite accustomed to many of their peculiar ways.

In appearance these people are short and thick set, with very fat round faces, usually almost entirely devoid of hair.

Their eye-brows and lashes are very small, and against their dark skins are scarcely discernible, so that their brown, oily faces, and eyes without trimmings, have often a very bare and homely appearance. Their hair, like that of the Indian, is black and straight, and by the women it is worn platted and twisted up into three knobs, one at either side of the head and one at the back.

The men wear their hair short, cutting it occasionally with a knife, and have heavy bangs in front to protect their foreheads from the cold in winter, and from the sun in summer. There are, however, some exceptions to the above description, the writer having met with some really handsome, stalwart men, up to the standard height of Europeans, and some very pretty, charming women.

Most of the Eskimos have very bright soft brown eyes, which of themselves are features of beauty; but they serve these savages a better and more useful purpose—they furnish marvellous powers of vision, enabling their owners to see objects clearly at great distances when they would be quite invisible to an average white per-

son. As an example of their wonderful powers of sight, the writer will relate a little incident that once took place during his stay with them. At one time a party of Eskimo hunters had gone out upon the floating but heavy ice of Hudson Straits to hunt seals. The ice, owing to the strong tidal current, was so broken and rafted up into great piles that it made travelling

MR. J. W. TYRRELL IN ESKIMO GARB.

very difficult and dangerous: but food being scarce, the hunters had determined to go, in order, if possible, to supply the wants of their hungry families. They took with them their kyacks, or skin canoes, to cross the open stretches of water. When walking upon the ice, these would have to be carried on their shoulders, and so would be alternately launched and hauled out, perhaps fifty times in a day. Such travel is necessarily very dangerous, for the currents caused by the tides are often as swift as that of a great rapid river, causing the ice to whirl, crush, and lift until it forms into immense piles.

No wonder then that the families of these bold men became anxious regarding the safety of the hunters when their absence was prolonged, and days passed and they did not return. The writer sympathised keenly with the poor people, and, besides doing what he could to supply their immediate wants, walked up frequently with his telescope to a "look-out" hill to, if possible, discover some trace of the absent party. A little daughter of one of the hunters, seeing him one day thus looking for her father, came to where he stood to receive any news he might have to give her: but she had no sooner reached the elevation of the "look-out" than, leaping with delight, she exclaimed "Awunga tacko Ittata." (I see father.) The writer asked where, and she pointed away across the glistening field in the direction in which he had just been gazing with the big telescope, and had seen nothing but ice. At first he thought that she was mistaken, but turning his telescope again in the direction in which she pointed, presently discerned away on the horizon, a black speck, which, sure enough, proved to be the returning hunters.

To the writer's naked eye, they were quite invisible, and almost so with the aid of the telescope. Soon afterwards, as they came nearer, he could make them out more clearly, but his eyes, aided by the telescope, were not a match for the bright brown orbs of the little Eskimo maiden; and she in this respect is only a type of her people.

The clothing of the Eskimo is made entirely of the skins of animals, chiefly of the seal and of the reindeer, seal

skin being used for summer, and reindeer skin for the winter. The skins are nicely softened and dressed with the hair on, and are neatly made up by the women, whose chief duty it is to provide clothing for their husbands and children The cut of the Eskimo garb both of the men and of the women, is somewhat peculiar.

A man's suit may briefly be described as follows:—Commencing at the foundation, it consists of a pair of fur stockings or duffles, covered by long waterproof moccasins which reach to the knees, and are just met by short seal or deer skin trousers. The suit is completed by a jacket or jumper made of the same material as the trousers, which is pulled on over the head, there being no opening in front to admit of it being put on like a coat. This jacket is provided with a hood, which takes the place of a cap, and may either be worn over the head, or pushed back when not required.

In the summer season, a single suit of sealskin, made as above, constitutes a man's entire clothing, but in the winter time he wears two of such suits of deerskin, the inner one having the hair on the inside, and the outer one having the hair on the outside. The female costume is rather more curious in appearance than the above. The foot wear is the same with both sexes, but in place of the trousers worn by the men, the women wear leggings and trunks, and in place of the jacket, a peculiarly constructed overskirt, having a short flap in front, and a long train, in shape something like a beaver's tail, just reaching to the ground, behind.

The back of the overskirt is made very full, so as to form a sort of bag in which the mothers carry their children; and like a man's jacket it is provided with a hood, but of very much larger size, so as to afford shelter for both mother and child. The women are very fond of decorating their dresses with beads or other ornaments, and all the garments are made with great neatness.

Like many other primitive peoples, the Eskimos, and especially the women, tattoo extensively. They do not all thus adorn themselves, but many of them have their faces, necks, arms and hands all figured over in such a way as to give them a very wild and savage appearance.

Many of the ladies, when in full dress, wear head bands, usually made of polished brass or iron, over their foreheads. These are held in position by being tied with a cord behind the head.

MRS. J. W. TYRRELL.

A stranger custom still, is that of wearing stones in the cheeks, upon either side of the mouth. This custom is not universal with the Eskimos, but, as far as the writer's knowledge extends, it is limited to those inhabiting the Mackenzie River district. The Eskimos of this district have the reputation of being a bad lot, and it is said that when they are heard to rattle their cheek stones against their teeth, it is time to be on the defensive. The stones are cut in the shape of large shirt studs, and are let through the cheeks by cutting holes for them

As to the origin of the Eskimo people, very little is known, but the most probable theory accounting for their existence on this continent, is that they were originally Mongolians, and at some very early date, crossed over the Behring Straits and landed in Alaska. This theory is based upon the fact that a similarity is traced between the Eskimo language and the dialect of some of the Mongolian tribes of Northern Asia One of the Eskimo traditions would rather tend to bear out this theory. It is something like this:—

A very long time ago, there were two brothers who were made by the beaver, and placed on an island in the Western Sea. There they lived and fed upon birds, which they caught with their hands, but at length food became scarce, and the brothers, being hungry, fought for the birds they had taken. This quarrel led to a separation, and one brother went to live in the western portion of our "Great North Land," and became the father of the Eskimos in that region, whilst the other brother went farther east and became the father of the natives north of Hudson Bay and Straits.

The range of the Eskimos is very large, extending completely across the northern part of North America, and toward the south to about the 60th parallel of latitude west of Hudson Bay, but east of the Bay, to about the 55th parallel; whilst toward the north, their range is practically unlimited.

They are a very thinly scattered race, roving in small bands over the great, limitless, treeless wilderness.

The writer's first impression upon meeting Eskimos was, that they were a wild-looking set. There were thirty-six of them, all women and children, piled into one of their "oomiacks," or skin boats, and all were whooping and yelling at the top of their voices, whilst all that were not paddling, were swinging their arms and legs in the wildest manner.

They were natives of Prince of Wales Sound, Hudson Straits, and were coming out from shore to meet the S. S. Alert, which to them was a fiery monster of wonder. They were accompanied by a party of men in their kyacks, and all were preparing to board the ship without invitation: but the first officer, by brandishing a cordwood stick, and threatening to hurl it at them if they came too near, and by the liberal use of some very strong English, which they did not understand, induced them to await his convenience to receive them.

When the Alert was past some shoals near which the ship was steaming, and safely into harbor, the natives were allowed to go on board. They were a strange-looking lot, and some of them were strangely dressed. One old grey-haired chief had apparently reached a stage of civilization in his attire not common amongst the Eskimos, for outside of his seal-skin clothing he wore a long, white cotton night-shirt, of which he was very proud.

The Eskimos are always pleased with the acquisition of white men's clothing, but their ideas as to how and when they should be worn do not always agree with ours.

Early navigators have described the Eskimos of Hudson Straits and Bay, as being savage tribes, greatly to be feared: and it is true that unfortunate crews have fallen into their hands and been murdered by them: but often such tales only come to us half told, the other half dying with the poor savage.

They possess very simple, childish natures, but coupled with this simplicity much quiet determination and deep jealousy, which when roused is likely to lead to acts of violence.

From the writer's experience, he does not think that the Eskimos would, without considerable provocation or great temptation, harm any one falling into their hands.

Though not usually quarrelsome or vicious, they do fight with each other, but only at appointed times, when all

old grudges and differences of opinion are cleared up at once. On the appointed day, all the disagreeing parties of the camp pair off, and standing at arm's length from each other, strike turn about, and in this deliberate, systematic way take satisfaction out of each other until one of the combatants cries "*ta-bah*" (enough).

The food of the Eskimo, as his name implies, is chiefly raw flesh: and so the preparation of his meals is an extremely simple operation, and the culinary department of civilization has no part in his life. Reindeer, seals, white whales, and walruses are to the Eskimo the staple articles of food, but polar bears, arctic hares and other animals, besides most of the arctic birds, are considered equally good.

It is rather a novel, if not a somewhat repulsive, sight to witness an Eskimo feast. The occasion of a feast is the capture of a seal or perhaps a reindeer, which, according to custom, during the winter season becomes common property, and all are invited to the lodge of the fortunate hunter to share in the feast.

The carcase of the animal is trailed into the middle of his lodge, and when all the guests are assembled, they seat themselves on the floor about it. The carcase is then skinned by the host, and the pelt laid down to form a dish or receptacle for the blood.

All things are now ready, and the guests being armed with knives, are invited to help themselves, and this they do with great dexterity, and continue to do so, not until they have had sufficient, but until the supply is exhausted and absolutely nothing remains but the skin and skeleton.

ESKIMO WOMEN AT ASHE INLET.

The blood, being considered very fine, is dipped up with skin cups or horn spoons, and consumed with the flesh.

The blubber or outer layer of fat which is found on most arctic animals is separated from the skin and cut into long strips about an inch square. Thus prepared it is swallowed though not eaten. It is simply lowered down

the throat as one might lower a rope into a well.

During the summer season the blubber is not used as food but is saved for reducing to oil to be used in the lamps during the long, dark nights of the succeeding winter.

An Eskimo appears to have no idea of a limited capacity for food, but usually eats on until the supply fails.

The writer knew of one exception, however, where an old woman, after doing heroically, was forced to yield. A party of Eskimos were having a big feast upon the carcase of a whale, which they considered very good food, when she, in her ambition, over-estimated her capability and ate until she became quite torpid. Her friends, out of respect for the old lady, supposing her to be dead, trailed her out and buried her in the snow; but a day or two afterwards she kicked off the snow that covered her and rejoined her companions.

Next to stowing capacity, an Eskimo's stomach is noted for its powers of digestion. For instance, both the flesh and hide of the walrus are common articles of food with them, and these are so hard and gritty that when skinning or cutting up the animal one has to be continually whetting and sharpening his knife.

The skin of a walrus is a good deal like that of an elephant, and is from half-an-inch to an inch and a-half in thickness; but notwithstanding this, and the hardness of its structure, the little Eskimo children may often be seen running about gnawing pieces of walrus' hide, as if they were apples. Sometimes, however, they have no walrus' hide, or meat of any kind, to gnaw, for occasionally in the spring season the condition of the snow and ice is such as to render hunting impossible, and though they store up meat in the fall for winter use it is often used up before spring.

When this state of things occurs, the condition of the poor Eskimos is very deplorable. They are forced to kill and eat their wretched dogs, which are even more nearly starved than themselves, and next they resort to their skin clothing and moccasins, which they soak in water until they become soft.

Next to starvation, perhaps the most severe affliction that the poor Eskimo has to endure is that of snow blindness. This trouble is very prevalent in the spring season and is caused by exposure to the strong glare of the sun upon the glistening fields of snow and ice.

Snow blindness is thus, in reality, an acute inflammation of the eyes, and the pain caused by it is excruciating, being like what one would expect to suffer if his eyes were filled with hot salt. The writer speaks from experience.

In order to guard against the occurrence of snow blindness, the Eskimos wear a very ingenious contrivance, in the form of wooden goggles. These are neatly carved so as to fit over the nose and close into the sockets of the eyes; and instead of being provided with colored glasses, which the Eskimos have no means of getting, they are made with narrow, horizontal slits just wide enough to allow the wearer to see through. Thus an excess of light is excluded, but the sight is not entirely obstructed.

Like many a man in Southern Canada, the native of the frozen zone possesses a summer and a winter residence, and occupies each in turn as regularly as the seasons change.

His winter dwelling is built of snow, while his summer lodge is made of oil-tanned seal or deer skins, neatly sewn together, and supported by poles —if such can be procured—or pieces of drift-wood spliced together. A flap is left for the door, but there is no opening at the top, as in the Indian wigwam, or tepee, for, having no fire, they have no need of a chimney.

The atmosphere of those tents or "topicks" as they are called, is usually very sickening to one not accus-

ESKIMO TOPICKS, PRINCE OF WALES SOUND.

tomed to them, for the skins of which they are made are dressed in their natural oil, in order to make them waterproof. This has also the effect of making them very rank and odorous.

Topicks vary in size according to the wealth or requirements of the occupants. Sometimes they are scarcely large enough to allow two or three little people to huddle into them, whilst others are quite commodious, being capable of seating twenty people. The commonest form of topick is that of a cone, very similar to an Indian tepee, but it is sometimes rectangular and sometimes built with vertical walls about four feet high.

The furniture of these dwellings is very simple, consisting usually of a few skins, lying about the rocky floor, to serve as seats in the day time and bedding at night, two or three sealskin sacks of oil, two shallow stone vessels used as lamps, a few hunting implements, several little deerskin bags used as ladies' work-baskets, several coils of sealskin line, a few pairs of moccasins scattered about, and, at one side of the door, the somewhat repulsive looking remains of a carcase consumed at the last meal. Such is the Eskimo summer house.

His winter dwelling in the snow is rather more interesting and curious.

It is called an "Igloo," and is built in the form of a dome, with large blocks of snow. A common size of the dwelling apartment of an igloo is 12 feet in diameter, and 8 feet in height.

This is approached by a succession of three or four smaller domes connected by low archways, through which one has to crouch to pass.

The innermost archway, opening into the dwelling apartment, is about three feet high, and as one enters he steps down a foot or more to the level of the floor of the front portion of the dwelling. The back part—about two-thirds of the apartment—is three feet higher than where one enters.

The front or lower section of the igloo corresponds to a front hall, and it is in it that the occupants, as they enter, beat the snow off their clothing, or remove their outer garments when they wish to step up into the higher living space.

The floor of the entire igloo consists simply of snow, but in this upper apartment it is well covered with

deerskin robes, so that it is not melted by the warmth of those who sit or lie upon it.

Above the doorway of the igloo is placed a window to admit light into the dwelling. This is formed of a large, square slab of ice neatly inserted into the wall of the dome, and it serves the purpose for which it is intended exceedingly well, admitting a pleasant, soft light.

Above the window a much needed ventilating hole is usually made. This, because of the passing current of warm air, becomes rapidly enlarged, and requires to be frequently plastered up with snow.

Sometimes one of the long approaches or corridors is made to serve for two or three dwellings, each of which is connected by low archways with the innermost of the smaller domes. Usually opening out of the inner dome each family has one or two small pantries, where is kept a supply of meat sufficient for a week or two.

The furniture of the snow house is much the same as that of the skin topick already described: but the stone lamps come more into prominence, contributing light to the dwelling during the long, dark winter nights. These lamps are simply shallow stone vessels, usually half-moon shaped, and formed neatly of some description of soft rock. The rounding side of the vessel is made much deeper than the other, which shoals up gradually to meet the edge. The wick of the lamp consists of dried, decomposed moss, pressed and formed by the fingers into a narrow ridge across the shallow or straight edge of the lamp. In this position it absorbs the seal oil which is placed in the vessel, and when lit, burns with a clear, bright flame, free from smoke. The lamp is then made self-feeding by suspending a lump of seal blubber above it, at a height varying according to the amount of light and consequent supply of oil required. This lump melts with the heat of the flame, and drips into the vessel of the lamp, and one lump keeps up the supply for a considerable length of time. The supply of oil, which means the intensity of light, is increased or diminished at will, by lowering or raising the lump of blubber suspended above the flame.

One lamp is usually placed at either side of the entrance in the upper apartment. Both are kept burning brightly the greater part of the long, cold dark days of winter, but during the hours of sleep they are "turned down," that is, the lumps of blubber are hoisted; or sometimes one lamp is extinguished and the other made to burn dimly. These lamps, though chiefly designed to furnish light, also contribute a considerable amount of heat to the igloos. It is often necessary to turn them down to prevent the snow walls from being melted by the heat, though the temperature outside may be 40 or 50 degrees below zero.

Towards spring the snow houses become very damp, and, to prevent the roofs from being melted away, fresh snow has to be added to the outside. Before they are abandoned for the skin tents, they sometimes become so soft that they cave in upon the occupants, and they often cause much sickness in the forms of colds and pneumonia.

The building of an Eskimo igloo is by no means as simple a task as one might suppose. In the writer's first attempt to build even a little one, he grievously failed, and upon the next opportunity, found it interesting to learn the art from the native workmen.

The snow upon the bleak, barren lands is driven and packed hard by the ceaseless winds and gales, which hold high carnival in these regions, and so it is admirably suited for building purposes.

The first thing to be done towards the building of an igloo is the selection of a sheltered site, not in some thick woods, as there are no trees in the Eskimo country, but on the lee

side of some convenient hill—if possible, beside a lake or pond of deep water, which will not freeze to the bottom during the cold winter.

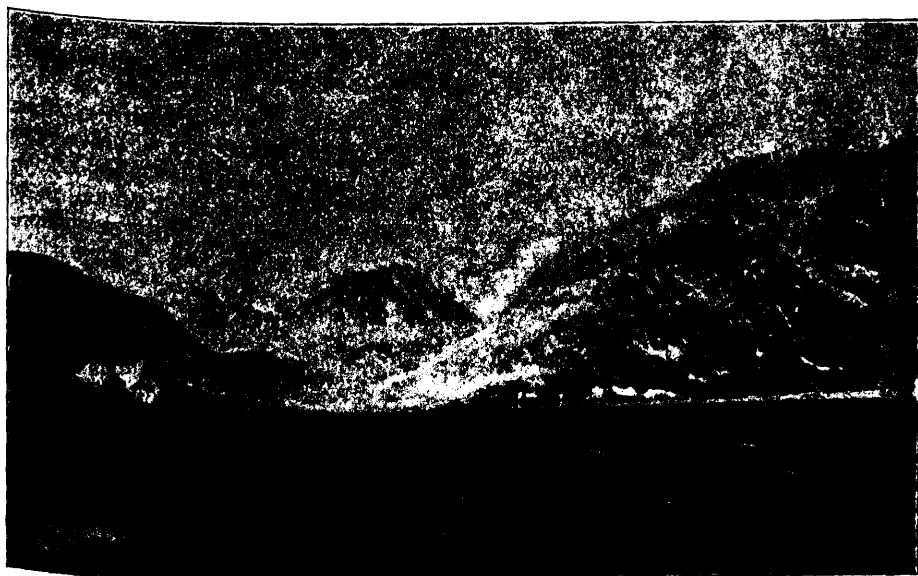
The spot having been chosen, the snow is quarried from it in the form of large blocks, from two to four feet square, and eight or ten inches thick. The snow is thus excavated to within about one foot from the ground; and with this preparation the building is commenced by placing the blocks upon edge in the form of a circle, and closely fitting them together.

As the igloo is to be built in the form of a dome, the walls must all lean inwards toward the centre. It is this peculiarity that bothers the unskilful workmen. The Eskimo overcomes the seeming difficulty, however, in a very simple way, by carrying the walls up in the form of a spiral, so that each succeeding block is supported and held in position by the block previously laid. That is, each block is supported on two edges, or rests in a notch, instead of on a level wall. By this method of construction the walls are rapidly and readily raised, until they are completed by one large crowning block.

The doorway is cut in the wall after the wall is mostly built, but before the roof has been closed in, and then the interior is shaped by excavating, or packing in snow solidly where required. The outer passage way is then built, in such a position as to best resist the influence of the weather.

The cutting of the snow is done with long, thin, ivory blades, neatly made for the purpose, or, sometimes, with long, steel knives or saws, when such can be obtained.

In their workmanship, the Eskimos are very neat. Wood is used for manufacturing purposes when it is available, but all they are able to procure are fragmentary pieces, which have drifted from some far distant shore or from the wreck of some unfortunate whaling vessel. It is from this rough material, and very scanty supply, that they make their sleds, frame their kyacks, make their tent poles, make handles for their spears and harpoons, and make their bows and a hundred other things; and, through



A COAST SCENE.

their untiring perseverance and skill, they manage to produce marvellous results. For example, a paddle is often made of two or three pieces of wood, but these are so neatly joined together, that if it were not for the seal thong lashings, the joints would not be noticeable. The lashings are put on green, or after having been softened in water, and are drawn tightly, so that when they become dry and shrink, they produce strong and very rigid joints.

ESKIMO HUNTERS, CHESTERFIELD INLET.

The processes by which these lashing thongs, and heavy lines for hunting purposes, as well as the small thread for sewing, are manufactured, are very interesting. A heavy harpoon line used in the hunt for securing walrus is made from the skin of the square flipper seal, a large species, about 8 feet long. For such use the skin is not removed from the carcase in the usual way, by cutting it up the belly, but is pulled off without cutting it, as one might pull off a wet stocking. The whole hide is thus preserved in the form of a sack. It is then placed in water, and allowed to remain there for several days, until the thin, outer black skin becomes quite decomposed. This, then, together with the hair, is readily cleaned off, and a clean, white pelt remains. Two men then take it in hand, and with a sharp knife soon convert the sack into one long, even, white line, by commencing at one end, and cutting around and around until at length the other end is reached. One skin in this way will make 300 feet of line. In this condition it is allowed to partially dry, after which it is tightly stretched, and thoroughly dried in the sun.

The result obtained is a hard, even, white line, three-eighths of an inch in diameter, but equal in strength to a three-inch Manilla rope.

The writer has seen such a line, when imbedded in the flesh of a walrus at one end, and spiked to the hard ice at the other by a stout iron pin, as well as being tugged at by six men, plough a furrow six inches deep through the ice, bend the spike, and

drag the six men to the edge of the ice, where the tug of war ended, the walrus being victorious and taking the unbreakable line with him into the deep.

Smaller seal thongs, such as are very extensively used as lashings for komiticks, kyacks, handles, etc., are made in much the way described, except that they are made from the hide of smaller seals, and often the process of removing the outer black skin is omitted, and the hair is simply scraped off with a sharp knife or scraper.

Finer lines, such as those used for fishing or for winding whip-stock, and thread for sewing purposes, are made from reindeer sinew: the best is that obtained from along the spine. The sinew from this part of the deer is always saved. It is prepared for use by first drying it, and then rubbing until it becomes quite soft, when it is readily frayed out into fibres, in which condition it is used for fine needle work; but when coarser thread or stout cord is required, these individual fibres are platted together, and with wonderful neatness and rapidity. One woman in a day can make fifty or sixty yards of this cord or thread.

Just here it would be well to note that with the Eskimos, all joints, of whatever kind, are secured by these thongs, they having no nails or screws to supply their place.

In making a sled or Komitick, the cross slats are all secured to the runners by seal thongs. In framing a kyack, the numerous pieces are all lashed together, usually with seal or deer skin, though sometimes, and preferably, with whalebone.

The Eskimo "kyack" or canoe is a peculiar craft. It consists of a light frame, neatly made from all sorts of scraps of wood, and strongly jointed together in the way just referred to. The frame having been completed, it is then covered with green skins, either of seal or deer, dressed as above described, with the hair removed. The skins are joined to each other as they are put on, by double water-tight seams, and are drawn tightly over the frame, so that when they dry they become very hard and as tight as a drum-head.

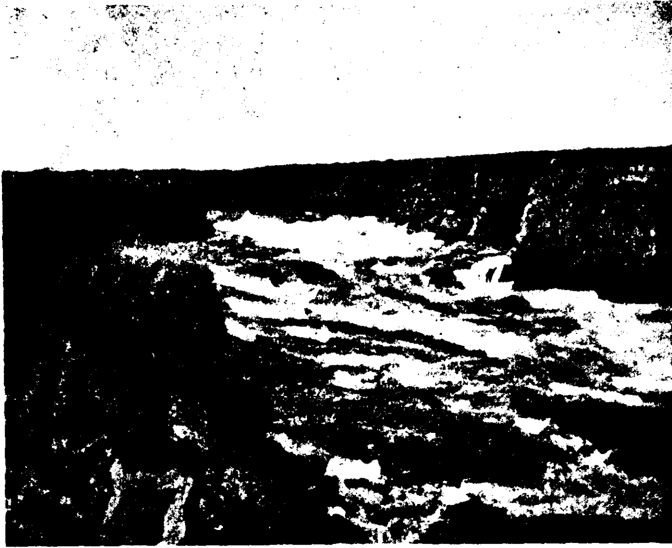
A full-sized kyack, thus made, is about twenty-two feet long and a foot and a half wide, and a foot deep. As appears, they are completely covered over on the top, excepting the small hole where the paddler sits, so that, though they are extremely cranky crafts in the hands of a novice, they are commonly used, even in very rough water, by an expert. Indeed the Eskimos have an arrangement by which they can travel whilst almost submerged in the water. They have a thin water-proof parchment coat, which they pull on over their heads in rough water. This they place on the outside of the rim at the opening of the kyack and tie securely, so that if the boat were to turn upside down, the water could not rush in.

A LAKE SHORE IN AUGUST.

An Eskimo in his kyack, can travel much faster than two men can paddle an ordinary canoe. The writer has known them to make six miles an hour

in dead water, whereas four miles would be good going for a canoe.

The Koomiack, or Eskimo women's boat, is a flat-bottomed affair of large carrying capacity. Like the kyack, it is a skin-covered frame, the many pieces of which are lashed together with thongs of skin or whale-bone; but instead of being covered on top it is all open, and is of a much broader model, and not so sharp at the ends. It is chiefly used by the women for moving camp from place to place, but is never used in the hunt. It is essentially a freighting craft, whereas the kyack is used only for hunting or quick travel. Koomiacks are often made large enough to carry thirty or forty people. They are propelled by ordinary paddles, not by the long double-bladed ones used with the kyack.



IN THE ESKIMO COUNTRY—A RAPID IN FELZOO RIVER.

The Komitick is a sled of rather peculiar design. It consists simply of two parallel runners, twelve or fourteen feet long, built of wood, and placed about eighteen inches apart, upon the top of which are lashed a number of cross-bars or slats. The runners are shod either with ivory or with mud, the latter answering the purpose exceedingly well. The mud covering is of course put on in a soft state, when it can be easily worked and formed into proper shape. When the mud is on and the surface nicely smoothed off, it is allowed to freeze, and speedily becomes as hard as stone. In order to complete the komitick and put it in good running order, there is one thing yet to be done. The shoeing, whether of mud or of ivory, has to be covered with a thin coating of ice.

In order to do this, the Eskimo overturns his komitick, fills his spacious mouth with water from some convenient source, and then from his lips deposits a fine stream along the runner, where it quickly freezes and forms a smooth, glassy surface.

During the winter season the komitick forms an important factor in the Eskimo life. It is drawn by a team—not of horses, nor even reindeer—but of dogs. The number of animals forming a team varies greatly, sometimes consisting of not more than three good dogs, but at other times, fifteen or more are attached to a single sled.

Each dog is attached to the komitick by a single line, the length of which varies directly as the merits of its owner. Thus the best dog in the team acts as leader, and he has a line twenty or twenty-five feet in length.

In order to control the team, the driver carries a whip of rather extraordinary dimensions. This instrument of torture has a short wooden handle only

about eighteen inches long, but what is lacking in stock is more than made up in lash, for this latter, made of the hide of the square flipper seal, is about thirty feet in length. An Eskimo can handle his whip with great dexterity, being not only able to strike any particular dog in the pack, but any part of its body, and with as much force as the occasion may require.

The writer's first attempt at dog-driving was anything but successful. The experience was gained in January, 1885, on Big Island, Hudson Straits, when one day, having been confined to the house for some time on account of bad weather, which still continued, he determined to take recreation by going out for a drive with his dogs. Accordingly after breakfast, an Eskimo servant was instructed to harness the team, whilst he proceeded to dress himself warmly in deer skins. A few minutes later, both dogs and master were travelling at a break-neck speed down the slope of the land to the harbor ice, but when the ice-foot was reached—being the time of low tide, a perpendicular drop of about thirty feet was met with, and very naturally the dogs declined to go down.

A broken place in the icy wall was, however, found, and after a great deal of exertion on the part of the writer, and a vigorous application of the whip, which more than once lashed his own face, the dogs were all safely landed on the level harbor ice. But here they were exposed to the sweep of a cold north wind, which drove the snow into their faces, and so they positively refused to go. The writer, however, having set his mind on crossing the island toward the north, endeavored in every conceivable way to urge on his balky steeds, but unfortunately, being a novice at dog-driving and in the use of the Eskimo whip, he was forced, after two hours of desperate exertion, to acknowledge defeat, for then the stubborn animals breaking away, made a successful run, until they were again stopped by the perpendicular wall of the ice-foot.

When the writer came up to his runaways, he did not attempt to again shape courses, but assisted them up to the icy precipice, and let them go, having obtained quite as much recreation from the drive as he had hoped for.

In later attempts at the Eskimo mode of winter travel, he has been more successful, and has enjoyed many a komitick drive over a snowy wilderness. Some months later, in company with a party of Eskimos, he undertook to make a sled journey to a native village about twenty-five miles to the northward of Big Island.

The days were still short, so that an early start was not convenient, but about 10 o'clock in the morning the fifteen dogs constituting the team were harnessed, and the party was ready to start. The day was fine and the snow hard and in good condition for travelling, so that at the first crack of the driver's whip the dogs bounded forward, and sped away down the slope of the land, to the icy plain of the harbor.

The writer did not act as driver on this occasion, but preferred to roll up in deer skins, and allow an Eskimo expert to wield the whip and guide the team. For several hours the road chosen led across frozen lakes and icy plains, and all went merrily on. About one o'clock, a halt for lunch was made upon a small lake.

A SLEEPING BAG.

By means of an Eskimo ice chisel, a hole was soon made through the heavy ice of the lake, and water obtained. The kettle was not filled, however, and put on to boil, for the

very good reasons that they neither had the kettle nor the wherewith to boil it; but, both Eskimos and dogs quenched their thirst together at the waterhole, and then the former sat about upon the snow, and enjoyed a hearty lunch of raw venison. The writer did not join in the common mess, but preferred to stick to the old custom of lunching on cooked meat sandwiches,

MR. TYRRELL RUNNING A RAPID IN FELZOO RIVER.

though they were frozen so hard as to crack like glass. Whilst lunch was being disposed of, the komitick was overturned, and the shoeing examined. It was found to be worn and broken. By means of a knife carried for the purpose, the damaged glazing was quickly scraped off. Two men then went to the water-hole, filled their mouths to their utmost capacity with the icy fluid, returned to the sled, and deposited the water along the ivory shoeing, where it quickly froze, and formed a new glassy surface on the runners.

This done, the sled was righted, the dogs' tow-lines or traces were untangled, and a fresh start was made. In order to speed the team, one man frequently ran ahead and acted as guide. The driver, who usually trots along beside or behind the dogs, was at his post administering gentle (?) reminders to any tardy animals. The writer, as before, was comfortably rolled up in deer skins, and seated on the sled, whilst the remainder of the party trotted along behind. All went pleasantly for about fifteen miles of the journey; but beyond that the road lay across a frozen strait, where much of the heavy ice was broken, and rafted into piles by the force of the great tidal currents. Travelling now became very slow and tedious, and to make matters worse, it was already becoming dark. As the party pushed on, the road became rougher, and soon the darkness became so intense that neither dogs nor drivers could see the way. The night was cold—the mercury standing at thirty-eight below zero—but fortunately there was little wind, and the sky was clear and starry. This latter fact enabled the travellers to struggle on in a general course toward their destination, but the chaotic character of the ice was such that most of the time the team had more than they could manage to drag the empty sled, and the men, between trying to help the poor animals through, and in getting along themselves, would, every few steps, either stumble up against a great pile of ice, or nearly break their necks by falling over a little precipice. The idea of getting out into level country before daylight seemed hopeless, and the writer advised remaining on the ice until morning, for, after several hours of thus struggling along in the darkness, he was pretty well used up. The natives, however, better realizing the danger of such a move, determined to push on as long as it was possible to do so; and the wisdom of their judgment was, moreover, soon made manifest when, to the great delight of all, some distance ahead, a faint light was observed. This, it was known, came from an ice window of the Eskimo village. The light was a very dim one when first seen, but it carried bright cheer to the wearied spirits of those who gazed upon it, for by this time the whole party had become almost exhausted. Their guiding star soon became brighter, and

ere long the writer and his companions were seated beside it with kind friends, who were delighted to receive them, and invited them to join in disposing of a haunch of venison (raw, of course).

The lodge into which we were received was the snow igloo of an Eskimo named Cow-hood-loo. It was a type of all other similar dwellings, and built and furnished as already described.

Three dwellings—those of Cow-hood-loo, Ug-due-ag-due, and She-o-ta-pee, made use of the same approach, and were thus connected through the innermost small dome.

The writer, however, took little notice of his environments during this first night passed in an igloo, but was satisfied to roll up in his deer skin robes and await the morrow.

Before going to sleep, however, an interesting little incident, which was afterwards observed to be an Eskimo custom, was noted.

Before lying down to sleep, the head of the family, in a kneeling position, muttered a prayer. This was also repeated in the morning the first thing upon waking, and to the writer it was a very impressive sight to see these poor pagans thus, in their darkness, feeling after the light of truth.

A curious Eskimo practice was observed at this time: it was that followed by the women, of daily chewing the boots of the household.

As already intimated, the Eskimo boots or moccasins are made of oil-tanned seal or deer skins The hair is always removed from the skin, of which the foot of the moccasins is made, but not always from that forming the leg. However, the point is this, that these moccasins, after having been wet and dried again, become very hard, and the most convenient or most effective, or possibly the most agreeable, way of softening them, seems to be by chewing. Whatever may be the reason for adopting the method, the fact is, that nearly every morning the native women soften most beautifully the shoes of the family by chewing them. What to us would seem the disagreeable part of this operation cannot be thoroughly understood by one who has not some idea of the flavor of a genuine old Eskimo shoe.

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After remaining at the Eskimo village for a day or two, the return trip was made. The only point, however, worth noting in this connection is that nearly the whole village turned out as an escort: the event of the visit of a white man being so wonderful.

The escort was not only composed of men and women, old and young, but also of little children, several of whom could not have been more than five or six years old; and it was marvellous to see the powers of endurance of these little creatures, for they travelled, along with the rest of the party, the whole distance of twenty-five miles, having no other object in view than of seeing the white stranger.

The Shin-ig-bee, or Eskimo sleeping bag, is an article essential to the comfort of the traveller when making long overland journeys during the cold winter season.

It consists of a long oval waterproof skin bag, lined with another of similar shape, made of soft, but heavy winter deer skins. The opening is

OOMIACK.

not at the top, but is near it, across one side; this is made with a flap and buttons, so that it can be closed up as closely as desired.

When the traveller is provided with this kind of a bed, he does not trouble himself to make a snow lodge for the night, as without it he would have to do, but he simply crawls into his "shin-ig-bee," buttons up the door-

way on the windward side, and goes to sleep, no matter what the weather or temperature may be. With the mercury standing at 40° below zero, a man may in this way sleep, warm and comfortable, without any fire, out upon the bleak, frozen plains.

Deer hunting with the Eskimos, is perhaps their most desirable and fruitful occupation. In some districts, seal and other animals are extensively hunted, but the Rein-deer is the universal stand-by. It is hunted with the bow and arrow, and also with the spear, as well as with guns when such arms can be obtained.

ESKIMOS AT HEAD OF CHESTERFIELD INLET.

Having already stated that the only wood obtainable by the Eskimos is broken fragments of driftwood—the question naturally presents itself: "Where do they get suitable material from which to make bows?" Well: the answer is, that they do not get suitable material for making such bows as are ordinarily used, but their ingenuity comes to the rescue, and designs a composite bow, which answers the purpose equally well. This implement of the chase is, in the first place, constructed either of pieces of wood or of horn neatly joined together: but of themselves these materials would form a weapon of very little value. In order to give it strength and elasticity, a stout platted sinew cord is stretched from end to end around the convexity of the bow, and this is twisted until it is brought to the required tension. By this mode of construction, when the bow is drawn, the wood or horn is only subjected to a compressive strain, whilst the sinew thong takes up the tension.

Thus very powerful bows are made, though of rough materials: but in order to use them with effect in killing deer the sagacity of the hunter is often severely tested, for it is not as in a wooded country, where there is cover behind which to hide or creep up upon the prey. Of course the hunter's first precaution is to keep the deer to windward of him, for the moment they catch the scent of an enemy they are off; but to get within range of the wary animals, upon the open plains, or rocky barrens, is often a difficult matter. A common way of working, when several hunters are together, is for some to take up positions in concealment, whilst the others drive the deer their way, causing them to pass within range of the deadly shafts. At a moderate distance, an Eskimo, with his ingeniously constructed bow, can drive an arrow its full length into a deer.

In a hilly, rocky district, it is quite possible to creep upon a band, but upon the open plains it is very difficult to do so.

Occasionally, vast herds of deer, numbering many, many thousands, are met with, and at such times their great numbers appear to give them confidence: then the hunter has no trouble in approaching them, but may go up and kill as many as he desires, either with bow and arrow, or with a spear.

The spear, however, is chiefly used for killing deer in the water. At certain seasons of the year, when travelling north or south, the deer cross streams, rivers, or lakes in great numbers, and these crossings are always effected year after year in the same place. The hunter, knowing their habits, lies in waiting at the crossings, and often from his kyack spears great numbers, as they are swimming past.

When more deer are killed than are required for immediate use, the carcases are "cached," that is, they are covered over by piles of stones to preserve them from wolves and foxes, and the place of their burial is marked so that during the next winter and spring, if food becomes scarce, these meat stores may be resorted to. When required, the meat thus stored is often quite blue or decomposed, but it has to be pretty bad when a hungry Eskimo will not eat it.

(*To be continued.*)

SUN WORSHIP.

Steadfast the Sun steers through the awful void ;
  Steadfast the Earth wheels in her mighty place ;
Only we mortals lag and are annoyed
  That the Gods march not with our stumbling pace.

What are our follies, what are all our fears,
  Our deep despair, or that bright hope that buoys ;
What all the raptures, all the bitter tears—
  What but the child's adventures with his toys ?

Comrades that waver, lo ! the All-Shining One
  Loves the least lucent of His starry line ;
He knows His course, and ours is but to run
  Sure in the circle His just laws assign.

The love of law is our true law of love :
  In this rich concord Life Divine is won ;
Our fainter octave thrills to that above,
  And wakes the silent Wisdom of the Sun.

ALBERT E. S. SMYTHE.

LITTLE MAID MARIAN.

BY ALLAN DOUGLAS BRODIE.

WILL they ever forget that night? It was in March, 1867, and landsmen as well as the "toilers of the deep," who were so unfortunate as to have to brave the elements, will probably carry the recollection to their dying day.

Old Michael Bett, the light-keeper at the Cove, as he went up to trim the lamps, was more than once startled by several huge gulls being driven with terrific force against the thick plate glass sides of the lantern; and on one occasion a pane was shivered to atoms and all the lights blown out.

Here was a calamity, terrible and unforeseen, that only occurred once before, and that a long time ago. While the break remained it was simply impossible to relight the lamp, and to repair it required time. Two hours or more were the men engaged with feverish haste in replacing the broken plate. They knew full well that it meant life or death to hundreds of human beings, whose only safety lay in the sight of that bright beacon aloft, and without which, the skilful mariner, with all his knowledge of navigation, would inevitably find himself at fault.

The rock on which the Cove light stood was one of a series dreaded by every sailor who neared its vicinity. It was difficult enough to make an offing with that guiding star before them; but its absence was an unlooked-for contingency, well fitted to cause consternation among the crew of any vessel, for even a British sailor, with his vivid imagination and host of superstitious fancies, can become "rattled," as the saying goes, at times, and lose his head.

That the crew of the S.S. *Levantic*, became thus hopelessly demoralized on seeing the Cove light suddenly disappear, will never be *admitted;* but certain it is, that in less than half an hour after the light went out, the noble ship—an East Indiaman—within but a few hours of her destination, struck the much dreaded reef, and became a total wreck.

Out of the twelve hundred odd passengers, fifty-two found a watery grave, despite the prompt assistance rendered by the boats.

Twenty-five years before, just such another catastrophe had occurred at the Cove light; with perhaps a lesser loss. Human invention and human skill, however, had not made much headway in the intervening years, and the system of illumination was much the same up to the time of this fearful night.

Although all those saved from the wreck received the utmost care and attention from the simple fisher-folk of the little sea-coast village, interest became centred in one of the unfortunates—a little baby girl—a beautiful little creature, with golden hair and blue eyes, who, as she lay peacefully in the arms of the homely but tender-hearted fisher-woman, whose tears flowed fast as she almost smothered the little stranger with kisses, looked up in her face with the utmost confidence, and crowed gleefully.

"Poor little darlin'; an' to think her mother, an' all her folks is drowned, an' her left all alone on this wicked earth;" and again the poor woman, who had lost her own darling a few weeks before, kissed the dimpled cheek, and then dismissing everyone else from the humble apartment, proceeded to rock the tiny castaway to sleep.

She had been brought ashore by one of the gentlemen passengers, into

whose hands she had been placed by the mother. Being one of the few who retained any coherent recollection of the terrible time, this gentleman remembered that the child's mother was one of those who were placed in the fatal boat, which swamped almost when or even before it touched the water. It was the same old story. The running gear of the davits was out of order and refused to work, the consequence being that one end of the boat dropped into the water, while the other remained suspended in mid-air. It is unnecessary to depict the result; suffice it to say that Hal Merrivane had been about to hand down the baby when the catastrophe occurred. Fortunately or unfortunately, as opinion may dictate, the little one was spared from sharing the cruel fate of her mother. A woman's scream was heard, then the merciless waters closed over the heads of the doomed ones and their voices were hushed forever.

A knock came to the fisherman's door.

"May I come in? How is the little one progressing?"

It was Mr. Merrivane who spoke.

"Yes, sir," answered the neat little daughter of the house. "Mother has gotten her to sleep, an' she do look so sweet an' pretty, sir."

Bending his tall frame to suit the requirements of the somewhat undersized door, Hal Merrivane entered the humble abode, and was shown into the back parlor, where, in the same cradle which, a short time before, had been sprinkled with a mother's tears, lay the little waif sleeping peacefully, and with a smile on the cherry lips, as she communed with the angels—mayhap with the mother, who, lost to her on earth, smiled benignly down upon her from the glorious realms above.

As the young man stood and looked at the little one resting there in all the trusting faith and purity of sweet and innocent babyhood, all oblivious of the terrible loss she had sustained, the tears, unbidden and unheeded, slowly coursed down his handsome cheeks, and then and there Hal Merrivane—the man about town—the pet of metropolitan society, and habitué of fashionable London clubs—made a solemn vow before Heaven that this child should never want for anything as long as he possessed the power to shelter and protect her.

Few men would have accepted such a responsibility unasked, and fewer still had they possessed the enviable position and prospects of Mr. Haldane Merrivane, for 'tis the poor, as a rule, who possess the essence of true charity and nobility, and give evidence, under a species of moral dissection, that they do not lack both heart and soul, as, alas! too many of their plutocratic brethren do. Mr. Hal Merrivane, however, was one of those who generally turn up among the hearty and soulful minority, and gloried in being original, and not altogether like every other man you meet.

He had long since realized that this world is not overburdened with thoughtful people, and charity generally displays itself in sundry philanthropic movements for the benefit of unknown heathen in unknown lands, with unpronounceable names, rather than in alleviating the sorrow and wretchedness of our next door neighbor.

However, before leaving the house to go to his hotel, Hal Merrivane intimated to the simple fisher-folk that he had decided to adopt the little waif until such time as she was claimed by her relatives, if relatives she possessed, and he made a further proposition that the neat little daughter of the house should accompany him up to London, and take charge of the baby girl until he could provide a proper nurse for her. To both proposals the fisherman and his wife gave a willing and ready assent, though it was hard to part with one who would, in time, have taken the place of their own lost darling.

Common sense gained the mastery, however, for they could not help but see that this fine gentleman, who lived up in "Lunnon," could do more for the motherless babe than their cramped resources would ever permit of. So they bowed their heads to the inevitable, and strove to look upon the cheery side of the matter. Thus it was settled.

As Merrivane left the cottage, almost the first object that caught his eye was the lighthouse, the lantern of which was in a glory of luminous brilliancy, casting afar over the darkening waters a rippling silvery path—star of hope to ocean toilers.

"Ah, false light! Had thou done thy duty yesternight, eternity would not now have claimed the soul of that loved one! And you, mischievous winds and cruel, cruel waves! What grief and keenest anguish have you caused since first the world began—but such is life!"

Musing thus, Hal Merrivane tumbled into bed, and slept the sleep of a man with a conscience, and in the morning whistled cheerily as he dressed. What cared he for the bandinage and chaff of club acquaintances! The thought never occurred to him for a moment; or, if it did, never troubled him in the least.

Merrivane was too popular a man to be subjected to such, if it was seen that he resented it; and resent it he most assuredly would, and in a manner that would place a wholesome check on further liberties of the kind.

Arriving at the station, he found Hester and her charge, accompanied by the old people, already awaiting him. Leave-takings were said; the wee protégé was almost smothered to death with kisses, and then "Mr. Merrivane, child, and nurse,"—Hal fancied with a smile he heard Jack Corrigan speak thus of him to an amused coterie of kindred spirits—found themselves flying through the country, at the rate of sixty miles an hour, with the great metropolis as their goal.

Arriving in London, Merrivane at once placed his charge in a quiet home, where she would be well looked after until he had completed his arrangements, and then, giving Hester, for her trouble, more money than the poor girl had ever set eyes on before, or ever hoped to again, he actually kissed her good-bye, and sent her back to the Cove.

Then, by way of making a beginning, Hal Merrivane dropped into the Metropolitan Club, and not only surprised his friends at his return from India, but dropped a thunderbolt into the midst of the Club's most astonished members by informing them that he was going to give up lodgings, and take a house, a housekeeper, a nurse, and an adopted baby.

This announcement was received with shouts of incredulous laughter, in which Hal himself joined heartily; but, quieting down he told them of the accident at the lighthouse, causing the total loss of the *Levantic*; of the scenes of horror which he, as a passenger, had witnessed; of the sweet little baby-girl, whose mother lay beneath the cruel blue waves, who was alone and friendless, and would probably drift to "the Lord knows where," if he had not come to her rescue, and made a vow to protect and cherish her.

"I became acquainted with the little one's mother on shipboard," he explained, "and had opportunities of forming a very high opinion of her character—in fact she was a dear little woman young and extremely beautiful, and so fond of that blessed baby.

"Knowing her as I did, and also that her husband had lately been carried off by jungle fever, how could I desert her child—leave it to the tender mercies of an uncertain existence—it would have been simply brutal.

"Her name was Mrs. Rennie, and she called the baby Marian—for the knowledge of which last I am ex-

tremely thankful, as it will save me the horrible task of hunting through a florist's guide for a name—but who or what her husband was, or why she was on her way home to England, she did not tell me, and as mention of her private affairs seemed painful to her, I did not press her to enlighten me.

"I can discover no trace of relatives in this country, and can now only await a reply from my brother, at whose place in the Dar-Jeeling tea district I have been visiting."

As Merrivane spoke of the dead girl, and her little baby, whom he had made a vow to protect and watch over, his voice became lowered and softened, while a deep hush fell upon his auditors

When he had finished, Jack Corrigan, at first the most highly amused of the lot, turned away his head, and then stepping quickly forward grasped the young man's hand in a warm clasp.

"Merrivane, old man ! you're a brick. There's not one fellow in a hundred would have acted as you have done in this matter, and I venture to assume every man in this room honors you for the sacrifice."

"There's no sacrifice about it, Corrigan, I assure you, for I've already taken quite a fancy to the little kid;" and followed by a shout of hearty laughter, Hal made his escape to attend to much neglected private business of his own.

Next day the house was secured, and two weeks later, after many alterations and improvements had taken place, it was declared ready for occupancy: but in the meantime Hal Merrivane received a telegram from the Cove which read :—

Some bodies have been washed ashore. Come at once.

Michael Belt.

Hurrying down to the little fishing village, Hal had little difficulty in identifying the body of the dead woman he sought for. He fancied she looked far more peaceful in death than she had ever done as he had seen her in life, and doubted not that she was happy and at rest for all time.

Sadly he covered the dead face, and ordered the body to be prepared for burial and sent to the station in time to catch the 5 p.m. train.

The only memento or clue to the discovery of possible relatives found was a plain gold locket in which were miniatures of Mrs. Rennie and, presumably, her husband, and on the back of it were the initials L. H., while something about the right-hand miniature drew Hal's attention.

It was the fact that the gentleman it represented wore the uniform of an officer of Her Majesty's army. This was a discovery which might lead to something, and he would follow it up when he went back to London.

Then Hal placed the souvenirs in his pocket-book, and slowly retraced his steps to the station.

He did not at once go back to London; but took a ticket for a pretty little Kentish village, in the quiet church-yard of which the dead girl was gently laid to rest under the same greensward that covered his own father and mother. Then, leaving instructions that the graves should have better attention, he hurried back to London, and the new house, where the nurse and the housekeeper had every thing spick and span, and a tempting supper laid out for him in the library, in expectation of his return.

Marian, as he had heard Mrs. Rennie call the child, or Little Maid Marian, as he always called her afterwards himself, was brought in for inspection, and crowed gleefully as she stretched out her tiny arms towards him.

How the young man's face lighted up as he beheld her, and how he hugged the little one and kissed her when no one was looking, for, to tell the honest truth, Mr. Haldane Merrivane had, up to this time, been rather afraid of babies, and fought shy of

them on all occasions. Once he had described to a laughing circle of friends how Harley Merry's wife had entrapped him into going to see their new baby; how "her flabby majesty" was poked into his face for admiration, and put through a regular drill for his edification. "Clap oo hands"—"slap the baby"—say "ta-ta"—"say 'Good day, Uncle Hal.'"—"why, Hal, I believe the little darling really did say it," declared the proud and happy mother. "No, not quite," ventured her husband, "she was only choking over that piece of meat I gave her."

"Meat! MEAT! Mercy! gracious! Do you mean to tell me, Harley Merry, that you gave meat to that baby—Meat! to a baby only five months old. Mr. Merry!—Mister Merry! I actually believe you have lost what little common sense you ever possessed."

"Then," continued Hal, "there followed a lengthy period of back-slapping to bring up that meat, accompanied by unearthly howls like unto the voices of a thousand Thomas-cats on the back fence, while Harley and I beat a hasty and discomfited retreat to the smoking room—Harley, to escape further abuse, and I, because I had taken a sudden dislike to the little imp."

As Hal sat there now in the library tossing Little Maid Marian into the air and catching her in his big, strong arms, while she chuckled and crowed shrilly with delight, he thought of that other time, and smiled to himself. Then he held her still in his arms and talked to her in this wise, the big blue eyes regarding him gravely the while:—

"Little Maid Marian isn't flabby, is she? And me won't let Flora give her any meat until she is a great big girl. Oh, you little witch! how I wish you were my very-very own, then I would never lose you; but now, some fine day my Little Maid Marian will be claimed and will go away and leave me, and forget me altogether," and as he said it, Hal really looked alarmed, and hugged the little one closer. Poor old Hal, as yet, his heart was fancy free. He had never, up to the present time, possessed more than a passing fancy for any woman, and had often declared that they were all fickle and knew not the meaning of love.

And now, somehow, this little creature, neither kith nor kin to him, was entwining herself about his heart, and making him forget self and every other consideration but his desire to minister to the happiness of his little protégé

Her beauty seemed to increase as she grew older, and those blue eyes, so often full of mischief, anon grave and wistful, were indeed the "windows of her soul," and told more than many words.

Next day, Hal, through the good offices of an influential friend, paid a visit to the Horse Guards, and also consulted the Army List, and from both sources he learned that there had been a Captain Rennie in a line regiment stationed at Bombay; but the satisfaction this information occasioned was somewhat modified when he was further informed that the said Captain still lived—was very much alive in fact, having lately distinguished himself with honor in several raids against Dacoits.

Here was an unlooked-for contingency. The man whom Mrs. Rennie had informed him had died of jungle fever a short time before she left India, was still alive. Could he credit such information? Could he believe that that sweet woman, whom he had made up his mind was the very essence of truth itself, lied to him? No! No! he could not believe it—he would not believe it—he would write again to his brother and find out that there was some horrible mistake. The thought that the Mrs. Rennie whom he met on shipboard could be capable of such deception seemed sacrilege, and he immediately banished it from his mind as unworthy of him.

The second letter to India was written, and in due time came the reply, which, although calculated to mystify him still further, relieved Hal's mind somewhat. The Captain Rennie formerly stationed at Bombay—now at Lucknow—had a wife living, whom he married twenty years before. This settled the matter. He was not the man wanted, evidently.

Another visit to the Horse Guards, and another dip into the Army List. No, there was no other officer of that name in India, either at the present time or previous to the foundering of the *Levantic*. Further research only resulted in failure, and Hal Merrivane at last came to the conclusion that a romance of some sort was connected with Mrs. Rennie's life: but that it was perfectly honorable, he never doubted for an instant, and as to the solution of the mystery, he felt that he had done all that mortal man could do. Time alone could solve what now seemed inexplicable.

Five years quickly passed away—five happy years for Hal Merrivane and his little charge. And Little Maid Marian grew and blossomed, and became a thing of beauty, with every indication of being a joy forever.

Nurse Nora had gone away and got married, and her place was now filled by Miss Horncastle, the governess, and Miss Horncastle said she had never had a more apt pupil than Little Maid Marian—nor a more beautiful one. Marian was but a baby still; but she was quick as a steel trap. Learning the alphabet was simply play to her, and the quick gradations from C-A-T, and the First Book, to "Alice in Wonderland," were a source of wonder to her teacher and her guardian, and of triumph to herself.

From the time when she first began to lisp, her guardian never permitted Marian to call him anything but "Hal," which, later on, she herself altered to "Guardy." When Mrs. Mivens, the housekeeper, and Nurse Nora were once caught industriously trying to teach her to say "Papa," Hal frowned upon the innocent domestics and said:

"I am not her father, and do not wish her to know me as such. To Marian, I am simply 'Hal' or if she prefers it, 'Guardy.' Please remember this in future," and they did remember it and ofttimes marvelled thereat.

"Hal, dear!"—How funny it sounded coming from the little tot to the strong man, as she sprang into his outstretched arms one day when he arrived home earlier than usual from the city!

"Hal, dear, Miss Horncastle says you are going to send me away into the country. Are you? because if you are, I don't want to go—unless—unless you go too, Guardy."

"Yes, darling, I must do something to bring back the roses to your pretty cheeks. I am going to send you to a pretty place in the country, among the green fields and the buttercups and daisies, where you will have a cow, and chickens, and—a pony, and fresh milk, fresh eggs, fresh air, and fresh rosy cheeks all the time. Won't that be lovely?"

Little Maid Marian's eyes fairly danced with glee at this picture of Arcadian bliss. She had never, dear little soul, been out of the great city before, and Hal had often reproached himself for his neglect, until now a favorable opportunity presenting itself for the purchase of a small but exceedingly lovely little place very near his own native village down in Kent, he gladly secured it—for Little Maid Marian's sake.

In answer to his question, Marian appeared glad at first: but the expression gradually changed, and as she looked gravely up in his face the tears came into her blue eyes.

"It would be lovely, Guardy, if you were there, too; but without you, I would cry all the time, and then I—would die," and the eyes grew big and round with conviction. "Ha! ha! ha! So you would die if I stayed here in London, and worked hard to

pay for the cow, the chickens and the pony, would you, Little Maid ?"

"I don't want the cow, and I won't have the chickens, and I don't like you—you're a nasty man—to send me away—all—by—myself," and jumping down from his knee, she ran out of the room, sobbing as if her little heart would break, and poured her woes into the willing ears of Mrs. Mivens in the kitchen.

Hal laughed softly to himself. He had become accustomed somewhat to similar little ebullitions of feeling, and made no attempt to bring her back. "She will soon return to make friends again," he thought: nor was he mistaken, for in less than fifteen minutes there was a pattering along the hall, followed by a timid knock at the library door, while a small voice said very softly and contritely:—

"Guardy, dear, may I come in ?"

"Yes !"

His voice was gruff and unforgiving, and he held a big newspaper before his face.

The door slowly opened and a little form entered hesitatingly, and a chubby little hand was placed timidly on his knee.

"Guardy, I'm sorry."

No answer.

"Guardy, I AM sorry."

Still no response.

"Hal, dear, don't be angry with me, for I love you—I always love you, and was only pretending that I didn't, just now—Guardy !"

There were tears in the voice again. No man could withstand that, so the paper was thrown aside, and the big, strong arms were about her again, and they were friends once more.

"I'll go to the country, Guardy, and I'll milk the cow, and feed the chickens, and ride the pony, and drink milk, and pick flowers, and try to forget you, Guardy, and be—mis—er—able all—the—time, if you want—me—to."

"Forget me, my darling—I hope not. Why, I am going to visit you every day, and spend one whole day every week with you, I promise."

"Honor bright ?"

"Honor bright ! I swear it."

"No, don't swear, Miss Horncastle says it isn't nice. Oh ! won't that be lovely—splendid—grand ! And I've been so naughty, Guardy, to go and think you would leave me down there all alone."

"It will be splendid, and to-morrow we will all go down to Rosedale, and take possession."

And so they did.

Amid the beauties of her new country home, Maid Marian thrived and blossomed, and regained the lost roses in her pretty cheeks. Like her namesake of old, she would wander for hours amid the sylvan beauties of the neighboring Grange Woods, and picture to herself the snow-white wings, the shining diadems, and silvery wands of the fairies round their fairy ring beneath some stately oak, and sometimes she would go and weave garlands beside her mother's grave, or take long rides all over the country on her pony.

The cow, the chickens, and the flower beds, also claimed a share of her attention, and thus happy and contented, nearly ten years glided by over the head of Little Maid Marian, and her guardian had long since given up his business in the city, or left it to the hands of trusted agents, and settled down at Rosedale with her.

Hal called her Marian now, for was she not seventeen, anything but "little !" Her exquisite figure, and shapely, gold-crowned head, her beautiful face in all its radiant beauty of budding womanhood, her sweet, high-spirited nature—all were attributes well calculated to turn any man's head. Is it wonder, therefore, that Hal—Mr. Haldane Merrivane, bachelor, though nearing middle-age, should begin to feel troubled in his mind as he contemplated his girlish protégé, and felt forced to admit to himself that

she was the fairest object he had ever gazed upon.

In spite of himself, Hal was awakening to a new love, and it was this discovery which troubled him greatly. He knew Marian loved him; but he also knew that it was but the love of a grateful and dutiful child toward a kind and fostering parent. She would laugh at him if she knew, or at least would only pity him, and perhaps throw herself away upon him. No! No! No! Not if he knew it. He could never be so base as to allow such a sacrifice.

Then there was young Courtly, who was staying with Sir George Hemmingford at the Grange, near by. Marian and he were great friends, and a warmer attachment might be the result. Charlie Courtly was only a distant relative of Sir George, but Dame Rumor had it that he was to be the baronet's heir, and was, moreover, a gentleman. What better match could be found for Marian? "Oh, Marian! Marian! After all these years, now, when I most need thee, must I part with thee forever?"

More than fifteen years had passed since that awful night when the *Levantic* foundered on the Cove Reef, and Hal Merrivane had reached the shore safely with a baby-girl clasped tightly in his arms; and in all that time, despite his efforts to learn something, not the slightest clue had turned up to the finding of either relatives or friends of the dead woman who slept peacefully in the little Kentish churchyard.

And now Captain Englewood, a friend of Jack Merrivane, Hal's brother in India, was about to pay the latter a visit at Rosedale, and expectation was at its height—at least as far as Marian was concerned, for was he not an officer in an Indian regiment, as her own father had been, and might, perhaps, be able to tell her something of a parent whom she had never known?

But when Captain Englewood came, and heard Hal's story, he at first only shook his head, for he had been in India only six years; but, on second thoughts, he recalled an officer who had been in Bombay in '67, and was a pensioner, living in London at the present time. He would interview him on the subject.

Then Hal showed the Captain a miniature of Marian's father and mother in the little gold locket. He did not recognize the face of either; but he recognized something else—something which not only interested him greatly, but caused him no little excitement.

"Why, by Jove! This man wears the uniform of my own regiment. I must see Orton about this at once. He will be sure to be able to throw some light upon the subject;" and that very day Captain Englewood went up to London.

In the meantime, invitations had been issued for a ball at Sir George Hemmingford's, in honor of the coming of age of his kinsman, Mr. Charles Courtly; and two of the dainty missives reached Rosedale. One was for Mr. Haldane Merrivane and Miss Rennie—the other for Captain Elford Englewood. It is, perhaps, needless to say both were accepted, and it may be stated further that this was to be Marian's "coming out."

It is, perhaps, strange that Sir George Hemmingford had never seen Marian to know her, although they had been close neighbors for so long; but then the baronet had for years been a solitary man—self-contained, and absent-minded—his pre-occupation probably preventing him from ever noticing her, whilst she, having often passed him in her solitary rides, knew every lineament of the old man's face.

Hal's frequent absence in the city had also prevented a closer intimacy with the neighboring families, and up to the present, Marian, at least, had never been inside the Grange Mansion, although she had often wandered

through the outlying woods belonging to the estate. And so it was.

The ball at the Grange was on the same night that Captain Englewood had wired Hal he would return from London. Marian knew not on what mission he had gone: but Hal did, and was anxious in consequence.

However, the Captain not turning up at ten o'clock, Hal decided to wait no longer, so he and his fair protégé were driven over alone.

I will not endeavor to describe the blaze of light: the array of youth and beauty congregated within the grand old walls: the voluptuous music, as the strains from the band rose and fell like the waves upon a moon-lit shore—now a perfect swell of mighty harmony—anon dying away in a faint rythmic murmur. Oh, Music! Music!

Thou carriest me into another and mysterious clime—
The realms of the beautiful—the art divine,
Where melody and harmony entwine
In grand ensemble and delicate refrain.
With eager ears I seek to catch the strain.

Such were Marian's thoughts, as she sat for a few moments by herself in the conservatory, listening dreamily to the band's rendering of a new and exquisite waltz. Charlie Courtly had gone to bring her an ice, and she expected him back every moment.

On with the dance!
Let joy be unconfined."

"Ah, Merrivane! Is that you? I have been hunting high and low for you. I want you to introduce me to that interesting protégé of yours, whom Charlie simply raves about. As yet, I have never seen her, strange to say."

"It was for that very purpose I was looking for you, Sir George," replied Hal. "Marian has seen you many times in her wild harum-scarum rides through the country, and has chided me for my oversight. I think I saw her in the conservatory just now with young Courtly."

"Ah! with Charles, eh! I'll be bound the young rascal has long ago found the prettiest girl in the house, and is monopolizing her as usual."

Marian had left her seat, and was standing under the full light of the gasoliers in all the glory of her radiant beauty, whilst a quartette of young cadets hovered round in homage to the acknowledged belle of the evening, whose history and antecedents jealous mammas with certain and sundry marriageable daughters, were cosily engaged in raking to the surface.

"A mere nobody, dear Lady Betty"—does not even know who her parents were, my dear,"—"How shocking!" "I shall forbid the Lady Angela and the Lady Sophia calling upon the creature," etc., etc.

Such is the way charitably disposed mammas, who are overburdened with marriageable daughters—daughters, which some very, very mean persons might say were *in extremis*, quite regular enough, and gotten up with an all sufficiency of ill-taste, coupled with ill-breeding, to render them fit devotees to the shrine of the goddess of old maids.

"Pardon me, Marian: but you have not yet met Sir George Hemmingford. —Sir George,—Miss Marian Rennie —Pardon me, Sir, are you ill?"

"Who is this? My God! It cannot be! Louise! Louise! Is it thee come back to me from the dead to reproach me—me your father, who has never forgiven or done reproaching himself? No! no! It cannot be, and yet, how like her who is dead and gone!"

The old man's face was livid as he looked with wildly staring eyes at the girl before him.

Merrivane's heart beat fast as he heard these wild words. Was the secret of Mrs. Rennie's identity to be revealed at last.

The dancing in the vicinity of the group ceased, and there was a deep hush, when a gentleman, dressed in the uniform of Her Majesty's 48th, suddenly pushed his way through the

crowd which pressed around in idle curiosity, and whispered something in Sir George's ear, at the same time beckoning Merrivane and and his now thoroughly frightened protégé to follow him into an adjoining ante-room.

Passing his hands before his eyes as if to satisfy himself that he was wide awake, Sir George Hemmingford followed like one in a dream, and the door closed behind the four, or rather five, for young Courtly stayed closely at Marian's side, and looked in her face with tender questioning solicitude, as her guardian led her from the ball-room.

"Sir George," said Captain Englewood (for it was he), "my friend Merrivane only yesterday related to me the facts connected with Miss Marian's history (here he bowed low to the young girl): how he was a passenger on board the steamship *Levantic* the night she foundered, and saved the little baby-girl from sharing the same cruel fate as her mother.

"This lady called herself Mrs. Rennie, and on her person was found a little gold locket, in which were miniatures of herself and husband. These pictures, especially the right hand one, interested me greatly. It represents an officer in the uniform of the 48th Foot—my own regiment.

"As I had been in India only six years, I did not know the gentleman, who, I understand, died of jungle fever in 1867—also the year of the wreck.

"Knowing that a retired officer of our regiment who had been in India at that time, would be sure to throw some light on the mystery, I hurried to London yesterday, and hunted him up.

"Colonel Orton recognized the faces at once. The right hand one was that of Captain Marion Adair of the 48th, and the other—not Mrs. Rennie, but his wife, and your daughter—Louise Hemmingford!"

"Oh, Heaven! Can this be true?" moaned the old man, as he covered his face with his hands.

"There is no doubt of it, Sir George. Colonel Orton told me the whole facts, as far as he knew them. When your daughter secretly married Adair, who was a comparatively poor man, in your anger you—you cast her out from you—forever."

"I did! I did! May Heaven forgive me! And try as hard as I might to afterwards trace her whereabouts, my daughter's fate has been a sealed mystery to me till now."

"Colonel Orton," continued Englewood, "tells me that on the death of her husband, Mrs. Adair, with her baby, left India, it was presumed, for England, and he remembers perfectly that he wished to send some message with her to friends at home, and hastened to the docks for that purpose, only to find that the *Levantic* had sailed half-an-hour before.

"Casting his eye carelessly over the passenger list in the booking office, he was somewhat astonished at not seeing Mrs. Adair's name there, although he says he can swear that the *Levantic* was the boat she told him she would take He made enquiries of the clerk, who said that no one of that name had secured a berth; but that a lady, answering to the description he gave, and bearing a baby in her arms, had registered as Mrs. Rennie—yes, there it was in the register—'Mrs. Rennie and child.'

"Orton thought this strange at first, but afterwards came to the conclusion that Mrs. Adair probably had some very good reason for assuming a fictitious name.

"He did not hear of the wreck of the *Levantic* until years afterwards, for he was chasing Dacoits in the interior at the time, and when he had returned, it had ceased to be spoken of.

"Then his regiment was ordered to Canada, and he forgot the whole circumstance.

"Orton says it is all quite plain to him now. Upon her husband's death, the poor girl, left comparatively destitute and friendless, resolved to return

to England, and, throwing herself at the feet of her father, implore him to take her back to his heart again. She did not, doubtless, wish you to know she had returned, Sir George, until she had met you face to face, and she therefore assumed a name unknown to you."

"The locket! Have you the locket?" cried the old man, as he sank into a chair, almost stunned by these painful memories being brought home to him, and his hard-hearted cruelty, the result of inherent, Lucifer-like pride, being held up in all its glaring deformity.

" Here it is, Sir George."

Taking the locket in his trembling fingers, the old man had but to glance at the miniature to recognize his daughter.

"It is she! My own darling Louise! May God forgive me!"

Here Hal Merrivane spoke, and as his words came to complete the chain of evidence already formed, that proved beyond a doubt that Louise Hemmingford's child now stood before him, the old man looked at her with constantly increasing interest and love.

"Sixteen years ago, to-night," began Hal, " I was a passenger on the doomed steamship *Levantic*, East Indiaman, wrecked off the Devonshire Coast. Among those saved was a little baby-girl, whom I was in the act of handing down into her mother's arms, when the boat, into which the lady, whom I had known as Mrs. Rennie, had just stepped, overturned, the result of some defect in the tackle gear, and all on board were drowned.

"The babe, whom I carried safely to shore and afterwards brought up as my own child, (here Hal stroked the golden head beside him, while Marian clung to his arm and looked up lovingly in his face) turns out to be your grandchild, Sir George, the child of your own daughter Louise, who lies buried beside my parents in this very place.'

There was a moment's hush, which the baronet at length broke with quivering voice and eyes cast reverently aloft.

"My God! It is thus, that through thy gracious goodness, thou enablest me to atone for my grievous wrong and sinful pride. With reverence I thank thee for this wonderful opportunity of proving how deeply I repent of my deep sin, and pray now for thy forgiveness." Then turning to the fair girl before him, he said :—

"Marian, my child—my daughter—the image of your mother is so strong in you, that I can almost believe that 'tis she who now confronts me—not in reproach, but with deepest love. On bended knee an old man, whose earthly tenure is soon to reach an end, asks forgiveness of the child whose mother he caused so much sorrow and bitterness, and now seeks in her child to atone for.'

With quivering lips and tear-bedimmed eyes, Marian stooped over the aged form and kissed him on the cheek.

"And now," cried Sir George in a changed voice, as he arose, and took his grandchild in a warm embrace, "come! Let me introduce you, my new found daughter, to the assembled company, and you, my dear sir," turning to Hal, "let me thank you from the inmost depths of my heart for all you have done for my daughter, and for bringing to me most undeserved happiness—true happiness which I never expected to experience again."

It is needless to state that the assembled company, who were on pins and needles with a consuming curiosity, were a good deal more than surprised at the disclosure which followed, and the matchmaking Mammas were more envious than ever: though their envy now assumed another form—that of undue civility and extremest deference.

* * * * *

The ball at the Grange was over, and the afternoon of the next day had

come round. Mr. Charles Courtly had been making hay while the sun shone, and had told Marian of his love, and she, with many blushes had hidden her face on his shoulder and said nothing; but to Mr. Charles, her silence was golden. He immediately asked Sir George Hemmingford for his grand-daughter's hand, and Sir George had gravely referred him to Hal Merrivane.

"He, who has been a father to her all these years, shall be the one to decide who my grandchild's future husband shall be."

With a smile of forced gayety—oh! what it cost him—Hal placed Marian's willing hand in that of Charlie Courtly, and blessed them both, at the same time announcing his intention of going to Europe for some months on business, and requesting the happy couple to accept Rosedale as his wedding gift.

"Oh, you darling Guardy! But you won't go until after our wedding?" asked Marian, a shade of disappointment for a moment wrinkling up her pretty forehead.

"Yes, darling, I must go to-morrow, for business won't keep, you know. But, when you and Charlie are nicely settled down, I will drop in on you both one of these fine days, and then we'll have a time."

"Won't we, just?" cried Marian gleefully, as she rushed away to prepare for an early removal to her grandfather's residence.

Next day, Hal bade good bye to them all for a time. How hard the parting was, the world will never know. *She* had her young lover to comfort her for the loss of one who had been the best of protectors to her. *He* stilled the pain that lay deep down in that loyal, generous heart, and showed no repining that Marian, his little one, his little darling, his all, had been snatched from him, and had found in another, the one whom she loved most dearly in all the world, with a love such as only a true wife can bestow. Noble-hearted Hal.!

THE ST. LAWRENCE CANAL ROUTE.

BY ALLAN ROSS DAVIS, C.E.

APPARENTLY anticipating the necessities of the future, nature generously provided a navigable water-way for the transportation of the products of the Western and North-western States, and the Canadian North-west, to the Atlantic sea-board. The St. Lawrence gulf and river, in conjunction with the Great Lakes, extend inland a distance of 2,384 miles, affording open navigation for the largest ships afloat, for all but about seventy-five miles of the entire distance. Our forefathers very wisely decided that the intervening obstacles to navigation should be surmounted by the construction of a series of canals. They accordingly set to work earnestly, and, with commendable enterprise and perseverance, built a system of canals between Montreal and Kingston, and the Welland Canal. Unfortunately, their conceptions of the future development of the commerce of our country were too circumscribed. The canals were well constructed, and of a superior type, but designed to meet only the then present necessities, viz:—To furnish a military highway to the Upper Lakes, and afford provision for a very small volume of local trade. Lock dimensions of 200 × 45 feet with a depth of nine feet of water on the sill, were the maximum limits provided.

The enlargement of the Welland canal was decided upon by Government, owing to the rapid settlement and growth of the communities contiguous to the Great Lakes. The United States threatened the capture of all the Western traffic by means of the Erie canal, and several competing lines of railway from Buffalo to New York. Accordingly the Welland was enlarged and deepened its entire 26¾ miles, and the locks, 26 in number, were made 270 × 45 feet, and 14 feet deep.

It was re-opened for traffic in 1887. Government also decided that the St. Lawrence canals should be enlarged, to correspond with the Welland type, as fast as the finances of the country would warrant. The process of enlargement is being slowly carried on from year to year, and at the present rate, a quarter of a century, or more, will probably elapse before the 43¾ miles of canals, requiring 26 locks, shall be finally completed.

The United States Government, in the meantime, finding the "Soo" canal between Lake Huron and Lake Superior (built with two locks, and opened for traffic in 1851), too small to meet the increasing demands of the Lake Superior traffic, decided to build the then largest lock in the world—515 feet long, 80 feet wide, and 17 feet of water on the meter sill. It was re-opened in the year 1881—six years prior to the re-opening of the Welland.

Scarcely had a decade passed, however, until the "young giant of the west," knocked at the doors of Congress and Parliament, and firmly demanded enlarged facilities for the passage of freight through the "Soo." Fleets of vessels, propellers and steamers, he argued, were constantly detained at either end of the present canal, awaiting a passage through, and the short season of open water demanded active movement on the part of vessels, in order to handle the vast amount of freight.

The Governments responded with alacrity, and immediately began the construction of two additional canals. The American canal, located on the south side of the St. Mary's River, parallel to the present "Soo," will have

one lock 800 feet long, and 100 feet wide, with 21 feet of water on the sill. The Canadian, located on the north side of the river, in Canadian territory, is two-thirds of a mile long, with one lock 600 feet long, 85 feet wide, with approximately 20 feet of water on the sill. These new canals will be completed and opened for traffic in a year or two, when doubtless ample provision will be afforded for the future carrying trade between Lake Superior and all lake ports as far east as Buffalo.

PRESENT REQUIREMENTS.

Having hastily glanced at the past history of this great international waterway, let us examine some of the questions arising to-day in reference to transportation demands from the constantly widening productive areas of the American and Canadian North-west. In the first place, it has been demonstrated, beyond the possibility of a doubt, that farming operations in the North-west cannot be profitably carried on if railway transportation to the sea-board is the only or principal means afforded to enable the produce to reach the markets beyond the Atlantic. Future wheat prices, it is claimed by experts, must invariably rule low, except for conditions other than normal, such as a failure of crops on a large scale, or a continental war.

Other countries have been increasing their wheat areas, as well as the United States and Canada, with the result that the surplus has greatly increased. Prices are such to-day, that, after the transportation cost is deducted, little or nothing is left to compensate the producer for his labor. Our western wheat must come into competition in the markets of Europe with that of Australia, India and Russia, where rail transportation does not enter so seriously into the problem. Mr. Thompson, of the Duluth Board of Trade, says, in reference to this matter: "The farmers of the West, Canadians and Americans alike, realize that economy in transportation lies at the basis of their prosperity. They see that the average cost of transportation by rail is from eight to ten times the average cost of transportation on the Great Lakes, and they believe that, while it is physically impossible to transport their farms a thousand miles nearer the ocean, it is entirely practicable to bring ocean transportation a thousand miles nearer their farms."

The people of the West and North-west, regardless of an international boundary line, are making strenuous exertions to force this vital question forward in the clear view of Parliament and Congress, recognizing the fact, that, although much has been done towards the solution of the problem in the past, the present demands one grand final effort to complete some waterway from the Upper Lakes to the Atlantic, and render it serviceable and adequate for present and future demands. Were all agreed upon the plan of completing a waterway to the sea-board, it doubtless would become a comparatively easy problem. Unfortunately, however, there are several methods proposed for establishing an outlet, and each one has its numerous ardent advocates.

One route that looked somewhat promising a few years ago for the Canadian North-west, was that by Hudson's Bay, where, having reached Port Churchill, on its western shore, 500 miles north-west of Winnipeg, a seaport would be obtained, which is nearer Liverpool than is the City of New York. Whatever the future may reveal respecting this extremely short route, it is quite certain that for the present the route is practically abandoned.

The large propellers loading with wheat at Duluth transfer their cargoes at Buffalo to the small mule-propelled barges plying upon the Erie canal for 300 miles to Albany, or to the small railway lines making New York their eastern terminus. In view of the constantly increasing traffic of

the entire west along this route to New York, and on account of the interior coal fields, which would afford return cargoes for the west and North-west, Mr. Johnson, in a very able article in the November *Review of Reviews*, points out the necessity of a large ship canal cennecting Lake Erie with Pittsburg, and one connecting the Great Lakes with New York. With reference to the latter, he says: "The second point, concerning which there should be no doubt, is that, as far as the interests of the United States are concerned, the waterway from the Great Lakes to the ocean should pass through our own territory, and should terminate in New York. The St. Lawrence route is of great importance to Canada: by it she hopes to join her eastern and western domains with the strong ties of commercial intercourse. It would be of great advantage to her, also, to divert the products of our North-west from the lines they now follow to the Atlantic States and Europe. Canada's interests, however, are not ours. Our chief concern is to connect the North-west with the great cities of the Eastern States: they are our chief markets. With us domestic commerce ranks first: foreign trade second: and our domestic commerce has little love for Canadian waters."

Mr. Johnson does not state whether he would have the ship canal's western terminus at Buffalo or Oswego. Should the shorter route by Oswego be adopted, the Americans would immediately become interested, equally with Canadians, in the enlargement of the Welland canal, and doubtless would willingly contribute to the expense of enlargement. This canal has cost the Canadian Government $23\frac{3}{4}$ millions of dollars since its inception. The enlargement thereof to the dimensions of the "Soo" would probably cost as much more. An expenditure of 12 millions by each Government for this purpose would be assuredly justifiable, in view of the advantages to be derived. Certain inviolable rights, as to control for all future time, would necessarily be guaranteed to each party, so as to obviate the possibility of closing the canal against each other in case of any strained relations in the future. The idea of a joint enlargement by the two Governments has been considered and favorably received by many members of Congress, not alone in reference to the Welland canal, but the St. Lawrence system of canals. If the disquieting thought of possible future entanglements could be obliterated from the minds of the people of the two countries, there would be no hesitation in taking such action. In view of the fact that such an important international question as the Behring Sea fisheries could be amicably adjusted by means of arbitration in a very short period of time, it seems to me that sensible people like the Canadians and Americans should be able now, at the close of the nineteenth century, to divest themselves of these ominous forebodings of future warfare, and enter into a friendly agreement to encourage international trade, with the understanding that in case of any dispute arising that could not be settled satisfactorily between themselves, the matter should be left to arbitration.

Such an arrangement would not necessitate annexation, nor American federation, nor Commercial Union, but simply a friendly understanding of one another's rights and privileges. Then, if an enterprise, similar to the one under discussion, were contemplated, the two nations could jointly carry it on with a perfect guarantee that future events could not seriously interfere with its permanence.

The enlargement of the Welland and St. Lawrence river canals, jointly by the two Governments, would necessarily require joint ownership and control. Canada has everything to gain, and nothing to lose, in securing the enormous Western and North-

western lake traffic for the St. Lawrence route, which to-day is finding its way to the seaboard by means of American railways and the Erie canal.

Were Canada standing alone to-day, she might possibly have misgivings of the wisdom of yielding to a nation no larger in territory, but with twelve times the population, the right to navigate the St. Lawrence waters. With Great Britain at her back, however, Canada has nothing to fear. Were it possible for large ships to ascend the St. Lawrence—and it may be possible within the present decade—a British man-of-war could follow an American warship to the Upper Lakes in the same manner that the British fleet is patrolling the navigable waters of the world to-day: and Canada should have no reason for alarm at the sight of an American warship on Lake Ontario. The Americans are not disposed to join us in opening up this international route to the seaboard unless we become disposed to yield to them partial control of the waters entirely within our territory. Were we willing to grant this privilege, Mr. Johnson's argument, in the article alluded to above, against the St. Lawrence route, would have no weight. He says: "One feels like hesitating to disturb the sweet dreams of the advocates of American federation with any hue and cry of war: but the most ardent lover of peace will hardly deny that 'discretion is the better part of valor.' The existence of an open highway (the St. Lawrence) by which the warships of foreign powers can proceed to the very heart of our territory, and the absence of any waterway by which our men-of-war can pass from the ocean to the lakes, is not a situation which the patriotic American loves to contemplate."

THE NECESSITY OF THE ST. LAWRENCE ROUTE.

Definite action has already taken place in Congress towards the solution of this problem, where western representatives have endeavored to show that the rapid development of the resources of the North-west has rendered the products of that country the leading factor in their foreign trade, and that it becomes the duty of the American Government to take steps towards providing a deep-water outlet for the foreign trade of the country adjacent to the Great Lakes. They contend that the 14 feet basis, upon which the Canadian Government is working, is entirely inadequate: that to be serviceable, the outlet should correspond in depth to the "Soo" canal, in order that the ocean ships, ninety-five per cent. of which, engaged in the freight traffic, draw less than 20 feet of water, may enter the Great Lakes, and load their Liverpool cargoes at Duluth, Port Arthur, Milwaukee and Chicago.

Numerous conventions have been held in New York State, and elsewhere in the east, at which interesting discussions of various routes have been carried on and resolutions embodying the views of the delegates passed: but these conventions have been dealing more particularly with local requirements. The action of the convention meeting in Detroit, in 1891, resulted in Congress appropriating the necessary amount to deepen the channels of the upper lakes to a depth of twenty-one feet. Those held in Grand Forks, Dakota, in 1892, and in Washington and St. Paul last year, were international in character, and while several international questions relating to trade and commerce were discussed, "the deep-water outlet" was considered by far the most important of all. No definite canal route has been decided upon: but according to Mr. Thompson, "there is a deep-seated and abiding conviction in the minds of the men of the North-west that it would be to their mutual interest to trade more freely together. Future conventions will carry forward the work that has been already begun.

and in due time the matter will be pressed upon the attention of the respective Governments, until they take the matter up, and the wishes of the Canadian and American North-west will be granted in so far as the rights of all the people of both nations will permit."

A resolution submitted by the Interstate and Foreign Committee of Congress, dated February 8th, 1892, "to promote the improvement of the water-way from the head of Lake Superior, by way of the Welland and St. Lawrence Canals, and St. Lawrence River, to the sea," is the most sensible, as well as practicable effort, in my opinion, that has yet been made, by the people on either side of the Boundary line, towards the accomplishment of this indispensable enterprise. The resolution is as follows.

"Resolved by the Senate and House of Representatives of the United States of America, in Congress assembled, that the President of the United States be, and he is hereby requested to invite negotiations with the Government of the Dominion of Canada to secure the speedy improvement of the Welland and St. Lawrence Canals, and the St. Lawrence river, so as to make them conform in depth and navigability, so far as practicable, to the standard adopted by the Government of the United States for the improvements now in progress within the United States of the waters connecting the Great Lakes, and to that end the President is hereby authorized, if he deems expedient, to appoint three commissioners to negotiate on behalf of the United States, with the representatives of the Government of the Dominion of Canada, the terms and conditions of any agreement which may be entered into between the two Governments in pursuance of any proposition submitted in that behalf by the Government of the Dominion of Canada."

We have frequently been glad to send delegates to Washington in the past, with instructions to do all in their power to obtain some concession, which, when compared with the establishing of such a water-way as outlined in the above resolution, would be insignificant, in so far as lasting beneficial results to Canada are concerned.

In this resolution we have the anomalous example of the Americans proposing overtures to the Canadians in reference to a matter in which we should be as deeply interested as they, In fact we should be fully alive to the importance to Canada of the accomplishment of the proposal embodied in this resolution, and yet what have we done to encourage any action along this line? We have talked of ship railways and canals across the Ontario Peninsula from Georgian Bay to Lake Ontario. We have listened to proposals of back woods' routes through small rivers and lakes from Georgian Bay to the Ottawa river. We have made railway grants to enable us to reach Hudson's Bay, in order to start upon a voyage which might eventually land us in an iceberg. In fact, we have been considering almost everything proposed in reference to an outlet, except the most natural and by far the most feasible international route. I say *international* route. Our Government realizes fully the fact that the enlargement of the Welland and St. Lawrence Canals to the fourteen feet standard as now being carried on, will not, even if ever completed, make of this channel an *international* water-way. We hear it is true, lengthy discussions and explanations in the House at every session in reference to the millions of money being expended upon this system of canals, yet every Canadian who has examined the subject at all, realizes that our Government is but building a door for a colt to pass through when in reality there is an elephant on the inside striving to get out. They build a 20 feet waterway at the "Soo," while at Soulanges they build 12 or 13 miles of canal at the same time, on the 14 feet basis, both being in the same water-way. The development of the wonderful resources of the North-west has been met by larger freight carriers on the upper lakes. While a 14 feet draught was quite adequate in former years, it will not answer at all to-day, and the Government should be forced to realize that the continuance of the enlargement of the canals of the St.

Lawrence to the 14 feet standard depth is an almost useless and extravagant expenditure of money. The Americans have determined upon a 21 feet standard depth for an outlet to the seaboard; and the St. Lawrence, or some alternative route—if there be one practicable—will soon be decided upon if I am able to read aright the signs of the times. Canada will not be true to her most important interests if she does not do all consistent with her dignity as a nation to secure the passage of millions of tons of freight yearly from her western domains, and the American-west and North-west, through her own parts to her commercial metropolis of Montreal.

Railway freight rates east of Chicago have become reduced to a minimum, it is probable, owing to the strong competition existing between rival roads. Still the rates are entirely too high, and New York city can scarcely hope to continue to become the seaport for the producers of the West and North-west, with prices for produce ruling lower and lower, unless she can provide water transportation from Buffalo or Oswego on a larger scale than the tow-path affords.

New York, would vigorously resist the adoption of the St. Lawrence route by the American Government, but then New York does not speak for the whole Republic, as was clearly demonstrated when it became necessary to decide the location of the World's Fair. The immense country tributary to Chicago and Duluth, I believe would strongly favor the Canadian route providing it could be shown that the cost of enlargement of the canals would not be excessive, and that American rights and privileges would be guaranteed in the use of this waterway for all future time.

Now, in advocating this proposal, I realize the danger of misinterpretation, for some will conclude that it means the yielding to the United States of privileges which our fathers fought to maintain and perpetuate. I am thoroughly Canadian, however, and would be the last to yield to the Americans any concessions for which we were not to receive full compensation in return. We have satisfied them, time and again, that we are able to take care of ourselves. If the joint use of the St. Lawrence route were likely to lead to any serious difficulty with the United States, or to the alienation of the affections of the Empire to which we belong, I would not favor the proposition for a moment. But this appears like a purely business matter between two neighbors who agree to make one good broad road answer for both parties, instead of each constructing and maintaining a narrow lane, which will never prove entirely satisfactory to either.

Mr. Campbell, of Montreal, points out, in a recent number of the *Globe*, that the natural outlet of the traffic of the upper lakes is represented by the right-angled triangle of Collingwood, Toronto, and Montreal. Of course, his argument is based upon present conditions. He admits the necessity of the deepening of the canals of the St. Lawrence, but does not take into consideration the enlargement of the Welland Canal, which would permit the passage of the large propellers of the upper lakes, and thus render transhipment at Collingwood, from boat to rail, unnecessary. Mr. Campbell deals principally with the customs duties which, he claims, restrict the Canadian imports, and cause higher freight rates upon our exports from Montreal, owing to the fact that vessels cannot obtain full freights each way, and are obliged to charge higher rates on the outward trip than they would obtain if we were under free trade. He argues well for the port of Montreal in securing the North-West trade, as against New York, but he must realize that in no other way can the entire western foreign trade be so effectually secured for Montreal as by enlarging the canals sufficiently, between Montreal and Lake

Erie, to admit of the whalebacks and propellers coming directly from Duluth, Port Arthur, Chicago, and other upper lake ports, to Montreal. With reference to the western trade, he says: "The aim of our people for the past twenty years has been the consolidation of our Dominion: to accomplish this we have added one hundred and forty millions to our debt. Between our old provinces and our new agricultural empire lie vast uninhabitable lands, but our means of exchange and communication with that agricultural empire are the cheapest available on this continent, and their outlet to the world is under our own control. If we allow our enterprising neighbors to step in and do our business for us, who is to benefit most by what we are taxing ourselves millions of dollars a year to maintain?"

He further points out that, from the words of Senator Davis of Minnesota, and the action of the committee which framed the Wilson Bill, the Americans are growing solicitous of our northern and more direct waterway to the foreign markets, and are making a bid to secure our western freight and send it down to their New York seaport through American territory. They fully realize that we have the most advantageous route, and, moreover, that we have the disposition to withhold from them any jurisdiction over that route within the limits of our own territory, and hence they are, quite naturally, endeavoring to turn our western trade into a channel through American territory, thus defeating us upon our own ground, in the face of our more direct and cheaper route. Are we not as wide awake as Americans? Can we not see the outcome of our present policy? While the traffic of the upper lakes is expanding rapidly from year to year, as exemplified by the 11,214,333 tons of freight handled at the "Soo," by 12,580 vessels in 1892, we are somewhat humiliated in finding, in the words of Mr. Johnson, that "the tonnage on the Welland Canal is practically the same as it was four years ago: the total traffic for the year ending June 30th, 1892, was 944,753 tons, or about one-third the volume of freight moved on the smaller barge-traffic of the Erie Canal."

How can we make our canals more effective? Simply by enlarging them. Can we afford to enlarge them to a 21 feet draught, seeing that we have already expended 42½ millions on the Welland and St. Lawrence canals? If we can, let us set about doing so at once, before we squander any more money on the St. Lawrence. If we can not, let us in a frank, straightforward manner ask the Americans to assist us; and let us tell them, plainly, what privileges we are willing to grant them in the navigation of this waterway for all future time. Were a commission appointed by Parliament, empowered to pursue a course somewhat similar to that proposed in the resolution of the Interstate and Foreign Commerce Committee of Congress, alluded to above, it would meet with the hearty approval of the people of Canada, I believe, irrespective of party. The negotiations with the representatives of the American Government, would enable them to arrive at some satisfactory basis, by which the ships of both countries could freely navigate our common inland waters between Duluth, Port Arthur and Chicago on the west, and the Atlantic ocean on the east. The possibility of accomplishing so desirable an end, is surely worth the effort at this exceedingly favorable period.

"THE ERIE FLYER" EMERGING FROM UNDER THE ST. CLAIR RIVER.

ON ST. CLAIR'S BROAD BOSOM.

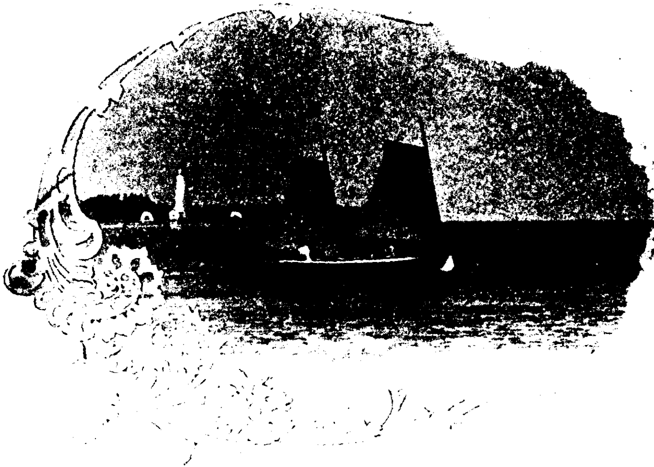
BY C. M. SINCLAIR.

THE names of rivers are often closely interwoven with the history of great nations. The Seine in France, the Thames in England, and the Mississippi in the United States, are as much a part and parcel of those nations' histories as are their great men. The absence of rivers is a most serious drawback to national advancement. Australia, richly dowered in other ways by Dame Nature, is handicapped by the unserviceableness of its rivers. On the other hand, a foreigner visiting this North American continent for the first time is bewildered by the the number and volume of our rivers and lakes. He finds rolling rivers a mile wide, whose names he has scarcely ever heard before, and inland seas, through which his vessel steams for a long time outside of sight of land, and yet his home atlas only records them in a long list of lakes.

Among all these widely scattered patches of fresh water, the magnificent system of navigable water-ways, known as the Great Lakes, stands easily first, not only by reason of their great length and volume, but by their great diversity of scenery, and above all by the marvellously busy scenes of modern shipping they present. The Red River of the north creeps along through nine hundred miles of prairie before it debouches into Lake Winnipeg, but its dirty gray water, rarely churned up by passing side-wheelers, does not impress one like the forty miles of blue St. Clair, the purity of whose waters not even the busy fleets thereon disturb. The Mississippi, when it reaches the Gulf of Mexico, can boast the longest river course in the world, but nobody thinks of comparing its muddy waves with the crystal tide of the noble St. Lawrence, which, as D'Arcy McGee says, "gives its freshness for a hundred leagues to ocean's briny wave." We look in vain, not alone in North America, but in the whole world, for a peer to the Great Lakes and their connecting waters.

In many ways, the most interesting

link in that great chain is the St. Clair river. It has not, it is true, the long stretch of the St. Lawrence, nor the latter's "Thousand Isles," but it has charming islands of its own, whereon the dreamer may lie and watch the passing up and down of a commerce beside which the trade of the St. Lawrence is insignificant—a commerce, representing some millions more of tonnage, than that of Liverpool and London combined—a commerce the world never dreamed of a score of years ago—a commerce, computed to be five times greater than that passing through the Suez Canal, at one time considered the busiest water-highway on earth. He may sit amid the primeval forests of a virgin island, populated solely by nine hundred Chippewa and Pottawattamie Indians, and converse with those who believe in and practise the old pagan rites, and he yet beholds before him, on the broad river, an endless procession of vessels of the most modern type. He may thus from the midst of the dead past, look out on the surging, restless present.



STRIKING OUT ON LAKE HURON.

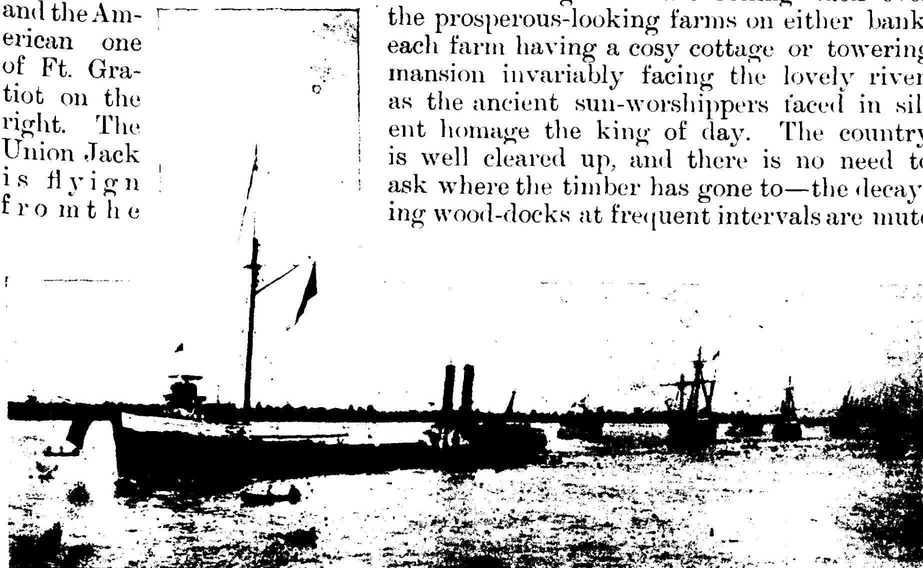
As I stood one bright Sunday aftertoon last summer on Walpole Island, outside the rough fence which guards the pagan's last resting-place, and saw the little triangular boxes above the heaped graves—each box with two holes to allow the spirit of the dead man free ingress and egress—it seemed to me that the year was not 1893, but some date hundreds of years before, when along this noble stream, dusky tribes of Indians practised their own weird customs, unscared by noisy tug or splashing side-wheeler. * "Surely," I said to myself "those Pagan Indians must have had poetry in their souls to choose this delightful spot for a burial place." To the left, deep and blue, flowed a branch of the St. Clair, called by the Indians "The Lost Channel," because a few miles farther on, when it meets the turbid waters of the Sydenham river, it disdains to mingle with them, and plunges proudly beneath, not to reappear again. Drawn up along the shore of the main stream to the right were the Indians' canoes, of exactly the same pattern as when Columbus landed in this New World. The huge, old elms seemed to bend down lovingly to pay their tribute to the pagan dead; the river breeze just faintly stirred the tree-tops with a delicious murmur, soothing and restful. Involuntarily I said "'Tis 1493 not 1893." Just at that moment, with the ensigns of Spain and Aragon flying from their odd-looking rigging, the caravels of the Columbus fleet came around the head of the island on their way to the World's Fair at Chicago. They

* In fancy, Bryant's Indian chief was again standing by the graves of his forefathers as he mused:

> "This bank, in which the dead were laid,
> Was sacred when its soil was ours;
> Hither the artless Indian maid
> Brought wreaths of beads and flowers,
> And the gray chief and gifted seer
> Worshipped the God of thunders here."

seemed entirely in keeping—it seemed the middle ages back again—nothing was wanting to fill out the picture.

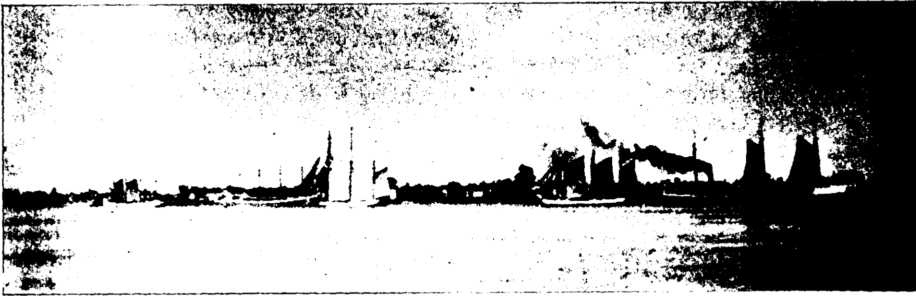
But come! Let us take a trip together on the river's broad bosom, starting from where it debouches from Lake Huron with an angry rush, locally known as "the Rapids," past the Canadian village of Pt. Edward on your left and the American one of Ft. Gratiot on the right. The Union Jack is flyign from the flagstaffs of the one and the stars and stripes from the other: and instinctively you feel that this rolling river marks the boundaries of peoples logically and well; and consequently you have more respect for the delimitation than for a mere iron boundary post.



THE COLUMBUS FLEET PASSING UP THE ST. CLAIR
Sunday, July 2nd, 1893.

Now we are passing Sarnia on the left and Port Huron on the right, and could you but climb to the mast-head, a novel sight would be presented to your gaze. Back of Sarnia, you would see a long railway train plunge boldly into the earth at full speed, down a great incline. Now, you know it must be directly under the keel of your steamer, but some seventy feet down, and if it would but stop a moment, the passengers in the coaches could hear the revolving paddle-wheels overhead. But it does not pause on its way, and so, looking back, you could see it emerge into the light of day again back of Port Huron. It is the celebrated St. Clair tunnel which our steamer has glided over, and you have seen one of the greatest engineering triumphs in the world.

The morning mists are rolling back over the prosperous-looking farms on either bank, each farm having a cosy cottage or towering mansion invariably facing the lovely river, as the ancient sun-worshippers faced in silent homage the king of day. The country is well cleared up, and there is no need to ask where the timber has gone to—the decaying wood-docks at frequent intervals are mute witnesses of the old days when wood was the sole fuel of the river-boats. In those times the "Mineral Rock,"—still chartered—was considered a wonder, making about ten miles an hour and carrying twenty-five thousand bushels of wheat: but now, as we steam swiftly down the river, we meet scores of boats, such as the "Curry" of St. Clair, speeding at seventeen miles an hour, and having below deck one hundred and twenty-five thousand bushels of wheat, or one hundred and forty-seven thousand bushels of corn. A test was made last season (1893), between the "Pioneer"—a very swift boat—and a sister-ship, the "Cadillac," of moderate speed, as to their relative *earning* power. They had nearly the same



ALONG THE CANADIAN SHORE.

carrying capacity, but the test clearly proved, that despite its greater coal appetite, the swifter ship was the more profitable. During the present season it is intended to put on the river route passenger steamers making twenty-five miles an hour—a speed nearly equalling that of the torpedo destroyers.

But while we have been talking of boats, our own boat has passed the green woods of Stag Island, in the centre of the stream, its fine trees beautifully preserved from the vandals who slaughtered the adjacent forests. The white tents of the campers escaped from city cares gleam through the openings with an air of peaceful, restful content. The names also of the clustering homes or woody retreats all along this delightful river indicate idyllic repose—"Idlewild," "Willow Beach," "Shady Side," "St. Clair Springs," etc.,—whilst the swarms of children wading out in the clear, blue water, to meet the steamer's swell, the polished yachts moored to the docks or skimming over the waters, and the general air of happy merry-making, fill out a picture likely not to be forgotten. After passing Fawn Island, also heavily wooded, the features of the landscape gradually change—the banks become lower, the river is wider and the adjacent country flatter; the addition of a few windmills would give a typical scene in Holland. This is St. Clair Flats—the summer home of the sportsman: for this is one of the few remaining spots where the wild duck is found among his reedy fens, and here, during nearly all summer, the gamy bass may be caught. The name "Venice of America"—often applied to this region—is not inapt, for water is the sole highway, the majority of the houses being built up on piles driven into the bed of the swiftly running river, which here has expanded and made wide reaches of shallow-flowing water, on each side of the navigable channel. If you wish to go calling here, you do not take your footman and carriage, but your rower and the family boat.

During the summer months this country of high-growing reeds and intersecting maze of watery channels stretching away till they are lost in Lake St. Clair has a population of more than three thousand, principally composed of Detroit's wealthy classes. Nothing can be more soothing to the overwrought nerves and jaded body of the wearied city man than to sit on the broad piazza of his comfortable club house and listen to the moan of the dying evening wind among the long grasses, or to watch the twilight stealing in over Lake St Clair's bosom. But in the winter, when the population is reduced to less than a hundred, a far different scene is presented. Ice—ice, everywhere. The great stream starts to jam here, and often jams clear back to Lake Huron, forty miles

distant: and sometimes this happens well on in the spring. The latest jam ever recorded, was on May 20th, 1877, when more than fifty vessels were caught in an ice-jam at Pt. Lambton, a few miles up the river. The strange sight was then witnessed of people walking on ice across a river a mile wide, when the adjacent woods were out in full foliage and dotted with wild flowers

This remarkable event—which in all probability will never occur again —was caused by a combination of nature's phenomena. The winter had been an unusually severe one, and ice several feet thick had formed around Lake Huron. The prevailing spring winds are usually from the west, and this piles the ice up on the shore of that great lake. But in the spring of 1877 there were very few strong winds, and no west ones of any force. Consequently, the heavy lake ice remained long after its usual season, unbroken, when on May 19th, the winds turned around and blew a gale from the north, sending the ice down the St. Clair river, and before noon next day, that powerful stream was choked with ice from St. Clair Flats many miles up. The rays of the sun soon broke it up, and on May the 22nd, the imprisoned fleet got under way again for Chicago.

Despite its unfriendly winter appearance, to linger along St. Clair's banks in summer is the experience of a life-time. If you have watched the blazing sun across its silvery waters, as he went to sleep behind the Michigan horizon; if you have seen the twilight drop softly down on its shimmering bosom, turning the sheen of each departing wave to bronze; if you have heard the hoarse calls of its fishermen drawing in their nets, or have been in camp on one of its peerless islands and dreamily watched the ships sailing by in the gleaming moonlight, or listened to the poetically-told river legends from Indian lips, by blazing fires on the beach,—then you have come under a magician's spell which nothing can ever entirely shake off. With a change of a word it might be said of the St. Clair, as Kipling says of India:

> "If you've 'eard the East a-calling,
> Why, you won't 'eed nothing else."

IN NORTH-WESTERN WILDS.

(The narrative of a 2,500 mile journey of Exploration in the great Mackenzie River Basin.)

BY WILLIAM OGILVIE, D.L.S., F.R.G.S.

III.

THE Rocky Mountains are visible from Fort Liard, and the foot hills are not far from the river, consequently the area of arable soil is very limited on the west side of the river. There is a good deal of fine, large spruce in the valley of the Liard, which would make better lumber than most of the spruce used in the settled part of the territories, but, as it is in the Arctic water system, it is practically out of reach. The balsam poplar, or, as it is called here, cotton wood, is very plentiful and very large, trees nearly four feet in diameter being often seen, though between two and three feet is the average diameter of the trees. These two trees constitute the great mass of the forest. A few small white birches are occasionally seen, and more frequently the aspen or poplar. There are also, sometimes, a few balsam pines on the tops of sandy knolls.

While at this post I got an account of a very large deposit of coal, situated in the mountains west of the fort. My informant, a son of the officer in charge, had seen this deposit, but gave me no idea of its extent, other than that it was very large. He was ignorant of its quality, also; but from his answers to my questions, I would judge it to be the ordinary lignite of the country. I could not gain any certain idea of its distance from the post.

This young man runs around the country adjacent to the post a good deal in the winter, collecting meat from the Indians, and they informed him of the locality of this curious stone, but he seems to have paid very little attention to the matter.

Black River joins the Liard a short distance above the fort. It is a shallow stream, about 200 yards wide at its mouth. The water is very dark; from this fact the stream takes its name. It retains its color several miles before it mingles with the bluish water of the Liard. About fifty miles up the Black there is said to be a bad rapid, but from the description given of it, I would judge it to be a short cañon with a sharp bend in it, which makes a troublesome whirlpool.

The Liard here is 600 yards wide, with a four and a-half to five miles an hour current. The water when clear is a beautiful blue, but generally it is turbid. In mid-stream, at low water, it is ten feet deep. The general width of the river from the Mackenzie up to the forks is about half a mile.

I paid off my man, Friday, and his son, as they could not go any further. They obtained a small canoe and returned to Fort Simpson. I was sorry for this, as they had both proved good, serviceable men, and attentive to their duty.

In their place I engaged the son of the Company's officer in charge, to go with me to Fort Nelson, on the East Branch, and after dinner, on the 7th of September, we resumed our way up stream.

The current from Fort Liard up to the forks (fifty-seven miles) is swift. In many places the river might almost be said to consist of rapids, but we saw no place we could not pole our canoe up. From this fact I am confident that either the steamer *Athabasca* or the *Grahame* could make good headway this far.

As we approach the forks, the river

trends towards the mountains until just below the East Branch some of the foot-hills are on the east side. Soon after passing the East Branch,

FORT NELSON, EAST BRANCH LIARD RIVER.

we enter the Rocky Mountains. This stream, like its sister river, the Peace, rises in the centre of British Columbia and pierces the Bocky Mountains; the Peace by one long (16 miles) impassable cañon: the Liard by several cañons and rapids, passable and impassable, and rejoicing in such appellations as "Devil's Portage," "Hell Gate Cañon," &c. In each case, from the mouth to the mountains, there is only one serious obstacle to steamboat navigation,—on the Peace, the falls, which are impassable; on the Liard, the first rapids, of doubtful navigability. On the Peace, the distance to the mountains is upwards of 800 miles: on the Liard, less than 300.

In the first half of the present century, before steamboats were introduced on the Stikine, all the goods for the Company's posts on the upper Liard were taken up this river in York boats, and so arduous was the work, that guides or pilots would sometimes stipulate, when being engaged by the Company, that they should not be sent up the "river of the strong current," as it was often called. Now, all the goods for this district go up the west coast to Fort Wrangel, and thence in river steamboats up the Stikine river, from which they are carried to Deer Lake, and over it and down Deer River to the Liard.

The East Branch, or as it is locally known, the Nelson, is from 200 yards to 400 yards wide. Between the forks and Fort Nelson, which is situated on the East Branch (111 miles up), no stream worthy of the name of river enters. At the forks the current is very swift for a mile or so above the Liard; but the water is deep.

At the head of this swift current, I got a set of observations for latitude and longitude, from which I derive latitude 59° 31′ 18″ and longitude 124° 29′ 39″.

The following day we found the current moderate, and the water deep; this enabled us to make good progress. All forenoon we pushed through fine, level country, showing good clay soil along the banks, and the thick growth of fine timber bore testimony to its fertility, the timber here being much like that seen along the Liard, a large percentage of that in the river valley being well adapted for making first-class lumber.

Twelve miles above the forks, I saw the first rock in *situ*. It rises abruptly from the clay bank on the east side of the river. At this point, it is not more than twenty feet high; but it increases in height for seven or eight miles, when it attains at least 500 feet above

the river. It rises abruptly in terraces, and, looked at edgewise, presents curiously weathered forms, some of them reminding one forcibly of ruins, and it required very little effort of the imagination to fancy oneself on some historical river, lined with mediæval castles.

Just where the rock attains its greatest height, the river turns sharply to the east as we ascend, and leaves this formation. In the vicinity, there are several lofty, terraced ridges of the same sandstone, which appears to me to be a spur from the mountains. The rock is a very coarse-grained sandstone, in some places appearing more like conglomerate than sandstone. The bedding is very thick, and not at all uniform, and the different layers often differ much in color and texture Often in the middle of a fine-grained, yellowish sandstone, we see a band of very coarse-grained, dark brown stuff, which looks as unlike the matrix as it can look. I made careful search for organic remains, often breaking up large pieces, but failed to find any.

SANDSTONE CLIFFS ON EAST BRANCH OF LIARD RIVER.
About 12 miles above the Forks.

Between the forks and Fort Nelson, there are three ripples which we might call rapids, but these, at the stage of water which I found in ascending, the *Grahame* or *Athabasca* would find no difficulty in stemming.

While eating dinner at the foot of one of them one day, a porcupine made its appearance, swimming the river. It was killed, much to the delight of the Indian, who after camping that evening, divested it of the offal, dug a hole in the ground, and in this hole a fire was built, and when the earth was sufficiently hot, the body, skin and all, was put in the hole and buried in the hot earth. The two men from Fort Liard then came out and ate a hearty supper with us, after which they had a smoke, and when the porcupine was cooked it was unearthed and eaten with as much avidity as though they had not tasted food for days. They invited us to partake, but we declined, I think much to their satisfaction. That two men could eat as hearty a supper as the rest of us did, and at that time our meals were no morsel, and in a few minutes devour at least ten pounds of meat, seems incredible, but it is true. They were up the next morning as anxious for breakfast as any of us, and showed no ill effects, though they must have swallowed over a pound of fat each.

Above the sandstone hills mentioned, the country is undulating; sometimes showing high ridges in the distance. The surface is all heavily wooded and there are many very large trees, both spruce and balsam poplar At Fort Nelson I selected an average

sized balsam poplar, cut it down and made the following measurements of it: diameter at stump, exclusive of bark, 29 inches; diameter at first limb, exclusive of bark, 17½ inches; from stump to first limb, 90 feet; number of growth rings, 145. The bark would add at least four inches to the diameters given. I have often thought that the bark of this tree would answer some of the purposes to which cork is applied. All the way up the East Branch River, moose and deer tracks were very numerous and fresh, but we never saw any of them, for the simple reason that we had no time to take the necessary precaution, long before we were in range of vision, to prevent them seeing us.

I arrived at Fort Nelson in the afternoon of September 15th, and much against my will had to remain until the morning of the 22nd. The 16th, 17th, and 18th were three days of continuous rain, which culminated on the 19th in a heavy downfall of sleet which clung to the trees and so loaded them that thousands of them bent and broke. No one at the post remembered any such catastrophe, as it may appropriately be termed, and certainly the forest furnished no evidence of such a meteorological phenomenon. The forest will bear witness of this one for generations, in the numerous broken trunks of trees of all sizes.

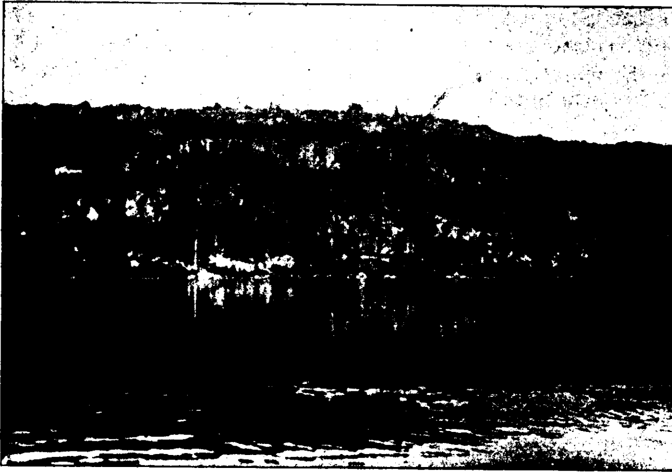
EAST BRANCH LIARD RIVER,
About 15 miles above the Forks.

The evening of the 20th was clear and cold, and the clearness of the sky enabled me to fix the position of this point as latitude 58° 49′ 18″, longitude 122° 54′ 06″.

I found there were only three or four Indians here, and of these only one knew anything of the route by which I proposed to reach Peace River. His trip through to that river had been made when he was a child, consequently his recollections of the route and its direction and difficulties were not very trustworthy. Besides, as he was a cripple, his services as a man would have been *nil*, while as a guide they would have been very doubtful. The Indians attached to the post were expected in from their summer's hunt in a few days: in fact it was known that some of them were only a short distance up the river, waiting for the rest to join them before they came in.

There were two bands under two chiefs due. It appears to be a rule that both must come into the post accompanied by all the members of their bands together. A rendezvous and time are appointed at which they meet and enter the post together, and from this rule they will not depart unless under stress of want. At their entry the two chiefs, seated in their canoes (when entry is made in the summer), with a

man or two to paddle them, come on in advance of the fleet of canoes. As soon as the post is sighted, the respective bands commence to fire their guns as rapidly as they can. The people at the post turn out with all the available guns and reply.



SANDSTONE CLIFFS, EAST BRANCH LIARD RIVER,
About 18 miles from Forks.

The entry I witnessed was on Sunday afternoon, and the noise of the fusilade reminded me of some other "loud Sabbaths." The chiefs were both old men, and, though the veriest tramp would hardly wear their clothing, the Usher of the Black Rod might take lessons in dignity from them. They stepped ashore from their frail craft with all the calm, dignified air of possessors of the earth in particular, and the universe generally. Their walk up the bank and into the house was a pageant, and the noise from their people's guns was continuous and deafening.

We watched the solemn procession in silent awe. The Professor would have liked to open a discourse with them on the "glacial period," but was too much awed by their dignified manner. However, he had his innings later, for within an hour they came to him as he was baking bread, and after making him a speech, expressing their gratification at meeting their white brother in their country, which rarely happened in that quarter, and declaring their great goodwill towards him, they began begging for bread, tea, tobacco, or anything of which they were sure their white brethren had an abundance.

The Professor asked me if he might give them something to eat, remarking, with emphasis, "Blast their picters; you'd think, to see them marching up the bank and into the house, a while ago, that the world was only a corner in their garden; and now they come around begging! Wall, I guess a bite of bread and cup of tea aint no great loss, but they needn't look so all-fired proud."

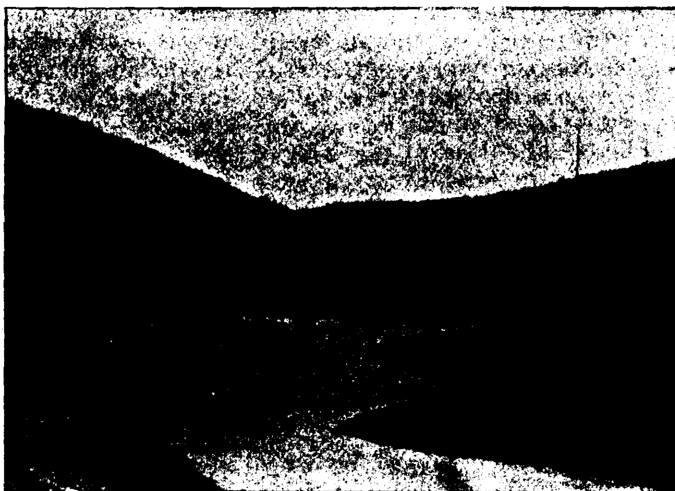
So shortly after, the two chiefs, and a motley assembly of their people, were cosily seated beside the Professor's fire, discussing the merits of his bread and tea and science with him, for he could not resist the temptation to unfold to them some of the wonders of the universe. How the post interpreter understood him, and put his remarks to the Indians, I don't know, but it afforded him much amusement, and the Indians received his remarks with many grunts of approval.

I immediately made inquiries to find how many of the thirty or forty men present could give me any definite information about the route I wished to go through to Peace River, but though I found that a great many professed to know it intimately, only one man

asserted positively that he had ever been through to the Peace, from which he came seventeen or eighteen years before, and had once since visited Fort St. John.

An appointment was made with him for that evening, in the interpreter's house, when I would take notes of the descriptions of it, in particular, and the country in general; also, under his directions, make a map of the principal topographical features in the intervening country. This I did, and also got much information from several others, all of which has been dotted in on my map. What I saw myself was shown by solid lines.

The Professor, learning something of what I had done from the interpreter, determined that he, too, would put up a stock of information for the journey ahead of us; and so he made inquiries concerning a source. It was not long until he found an old Indian who, under the influence of tea and tobacco, became very confidential, and, by mysterious hints and much pantomime, conveyed the impression that he was the only true oracle on the whole question. An appointment was made for a meeting that evening in the interpreter's house, when the Professor would meet him with paper, pencil, and pen and ink, which he borrowed from Mr. Christie, the Company's clerk, with strict injunctions that I was to know nothing about it. At the appointed time the Professor appeared, and after marking the cardinal points of the compass on a sheet of paper, and laying it down with reference thereto, he marked the position of Fort Nelson on it, and directed the Indian to trace out the course of the river we were to ascend, and the track overland we were to follow. Now, an Indian knows nothing about the cardinal points of the compass, and does not refer to them, but to some arbitrary, imaginary point, to which he refers the direction of any and every point around him; and from this fact we seldom find two Indians, when taken alone and independently, point in the same direction, from the same place, to designate the position of any sought locality, though they would all, without doubt, arrive at it, if sent to it. The Indian did not think the sheet of paper lay in a natural position, and turned it considerably from the Professor's position. This, the Professor would not tolerate, but angrily put it back, telling the Indian that was the way it should lie, and to fire ahead with his map. But the Indian could do nothing with the paper in (to him) such an unnatural position, and twisted it around again. After some squabbling the Indian gained his point, and began sketching the rivers



LOWER END OF CANON ON SICANNIE CHIEF RIVER.

Now, I never have seen a native who has any idea of scale in delineating topographical features on a map. He may represent several days' journey by two or three inches, and follow it by filling in four or five with the details of a few miles. As an instance of this, I have a sketch of the East Branch river from Fort Nelson to its head, in which a distance which takes three days to come down in canoes is represented by 2¾ inches, and immediately above it, a part of the river is drawn on a scale five times as great: or, a distance which takes a day and a half to come down in a canoe was made six inches long: but there were many details in the latter distance, that required room for their clear representation.

The Professor did not understand this, nor did the Indian understand how to show the features of about 300 miles of country on a sheet of foolscap, even if he possessed an intimate knowledge of it, which in this case he did not, his only knowledge being hearsay. So it was not long until the limits of the paper were passed, and the surface of the table bore the impress of the cartographer's pencil. Soon the table's verge was passed, and the map was continued on the floor to the wall of the house, still unfinished, as was shown by the Indian tracing a sinuous line through the air to represent the meanderings of the streams on the other side of the wall, all the time his face glowing with enthusiasm. This was more than the Professor had bargained for, and to say that he was amazed is not using exaggerated terms: he was dumfounded.

As soon as he could do so, he asked the distance to the confluence with another stream, marked on the map as only a short distance from the fort, and when told it took three days to come down in canoes, "Three days!!" he exclaimed: "Great Scotland!! Why this must be down in the Gulf of Mexico!" Putting his hand on the wall of the house, when the Indian was compelled to stop, "And he carried it outside, too! Why, dog-gone his picter! He has us down in South America, and he ain't finished. Say, ask him if he knows about Peace river, about the two Saskatchewans, the Missouri, and other big rivers down south. He's across the Amazon sure!" Unable to find suitable terms of indignation, he strode out, leaving the Indian in surprise, and the interpreter in convulsions of laughter.

Mr. Christie, the clerk, told me the story, and it was arranged between us that he would approach me in the morning in the Professor's presence, and present an account from the Indian for ten dollars for making a map. I was to feign ignorance of the transaction, and express vexation at such an unfounded claim. All of this was duly acted. Christie insisted that the account be paid. I asked him to get the Indian to identify the man who got the map made. This was more than the Professor could stand, and he admitted responsibility for it, but declared in very forcible language that it was not worth ten cents, much less ten dollars: that he would never pay for it; and that the Indian was an old fraud, which he proceeded to demonstrate in such strong terms that Christie and I retired in uncontrollable laughter. Fortunately, the Indian did not come around camp that day.

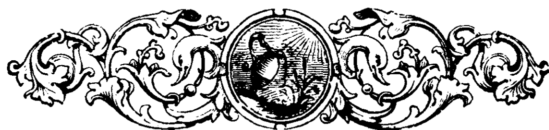
I may say here that when a native is making a map for you, it is not wise to interrupt him, no matter how strange you may think his representations. When he is done, ask him any questions you may wish, and no matter how seemingly inconsistent his answers may be, do not even smile. If you contradict him, or laugh at him, you will probably get no more information from him.

To get an idea of the various distances you wish to know, ask him how many days he took to travel over them; if by water, whether it was with or against the current: whether the current was strong or not;

whether he journeyed continuously or hunted on the way, or anything else that might retard or accelerate his movements. If the journey was made in the winter, make similar inquiries. You will then have to assume a rate of travel per day for him, and from it deduce your distances. In this way you generally can get a fairly good idea of the principal features of the country, and their distances apart.

As I wished to secure the aid of three or four Indians to help me to Peace River, there being a long portage reported between the water systems of the Liard and Peace, I asked Mr. Christie to negotiate with them for me. To secure the services of any, I had first to win the good-will and approbation of the chiefs, of whom there were two. A long talk was indulged in, some tobacco and bread was distributed to them, and many irrelevant questions were discussed before they would listen to my proposal about hiring help from them. They seemed to assume that I was a travelling chief among white men, and insisted that I should raise the price of furs before they would make any arrangement; it took some time to disabuse their minds of this impression. They then wished to know why I was so desirous of passing through this country. To have explained to them my real object would have invited an endless discussion of questions which I would not care to answer even if I could, so I simply told them that it was my shortest and quickest way home, and as it was late I had no other choice. After some very sage reflections they seemed to think this satisfactory, and consented that three men should accompany me. After much discussion three were selected, and as they had to make preparations, the following day was allowed them for that: but at the last moment one of them refused to go, and with some difficulty another one was induced to take his place.

(To be Continued.)



HOW TO BEAUTIFY A HOME.

BY MARY TEMPLE BAYARD.

PRE-EMINENTLY this is an age when every woman is possessed of the decorative fad. And granted that out of broom-handles and bread-toasters she does create marvels, and that many an otherwise cheerless home has been brightened by the little patches of color with which she has dotted the walls and tied the furniture, yet is it not well to call a halt, while we consider the danger of over-doing, of our being surfeited with cheap splendor and the products of faulty taste and false luxury. From the time Eve commenced house-keeping, a beautiful house has been the most deeply grounded desire of every feminine soul (be it in its normal state), and is manifested as early as doll days, when we played "keep house."

Man builds the house, but it is woman who makes the house. That sounds more or less platitudinal, we know, but nevertheless it is full of the living truth. Next to the deep-seated love of home (which women still possess, the croaking of all pessimistic cranks to the contrary, notwithstanding), is the feminine characteristic—a desire to lavish time and money on its fitting adornment. Given a free hand to banish and replace, what can she not do to beautify and adorn the home—if only she knew how!

But there is the rub. How few seem to know how? There is a decorative sanity in choosing colors, styles and methods. To make a proper choice is not always intuitive, and in consequence mere display is too often substituted for beauty and good design, and we have a flimsy exhibit of interior ornament with which it is really degrading to live. Many women who have just "picked up" the decorative fad, think they have grasped the whole idea when they have put petticoats on their lamps, flounces on foot-stools, trousers on the piano's legs, neckties on vases, and aprons on the radiators, and have swathed flower-pots in silk scarfs, until they look as if the intention was to prevent sore throat, and what with draperies, tidies, pillow-shams and "things," have made the whole place about as much of a bore to the man of the house as it could possibly be, and in the minds of all people with the insanity of the fad not yet upon them, furnished him with good and sufficient grounds for serious dissatisfaction.

In general, a man hates these things, but will make no fuss about them unless they interfere with his personal comfort. Artistically, they do not offend, for it seldom happens that he knows right from wrong in regard to general effect. He only notices, with commendable pride, that his wife has surrounded herself with as much "trumpery" as has Jones' wife, and is well pleased, until he falls over the same hassock a dozen times, because it is the exact shade of the carpet, and always in the only bit of space in the over-crowded room where a man could reasonably expect to get a foothold; or until the silken fringe of a "throw" sticks to his unlucky coat-sleeve and he drags it off, smashing the most costly bit of bric-a-brac in the room; or until he goes down town with a tidy on his back, or gets roundly "blown up" for desecrating the lace pillow-shams with his stupid head, "into which no idea of genteel living can be drilled." At such moments he feels fully qualified to give "pointers" in household decorations, and his verdict is: "To perdition with all such

flummery," while he resolves all over again, and for the one thousandth time, to found an asylum for incurable faddists—with his wife a charter inmate.

Now, what is it that is wrong with his wife's ideas in regard to beautifying the home? Is it not simply the fault that many others have; the failure to understand that the floor is intended to be walked on, and is not to be considered only as so much space upon which to crowd spider-legged chairs, unsteady stands, and easels which topple over almost at a breath; that the ceiling is to reflect light, and is not merely a something from which to suspend an expensive chandelier, and that the wall is to serve as a background or setting for guests as well as pictures, and therefore should be subdued in color, so as not to obtrude itself upon one's notice, and should not be over-crowded with pictures, or brackets with draperies, or cabinets filled with bric-a-brac.

It is the excess of ornament, no less about a house than a person, that fatigues the eye and distracts the mind. About half of the useless lumber in the way of fragile brackets, cheap ornaments, conglomerate pictures, throws, tidies and flimsy scarfs, now disfiguring our houses should be relegated to the attic; the good etching or water-color or engraving is worth a van-load of common stuff, and would cost no more. A few exquisite forms and fewer colors, a restriction of cheap and lavish ornamentation, a chaste individuality in selecting every article of furniture and decoration for its fitness for its environments and its use, and we shall begin to understand the true art of decorating the home, than which, of all industries among women, none is of more importance.

As I have already stated, such knowledge is not intuitive, but is easy to be obtained by an actual study of the technicalities of the profession, or by a habit of observation that amounts to the same thing—in a woman at any rate, who acquires so much by absorption. The woman's building at the Columbian Exposition (the design of a woman and the best expression of elegance, harmony and beauty, with its exhibition limited to work done by women alone), was in itself, in the region of art, a great inspiration and incentive for women.

Since that Exhibition, women, generally, are giving more attention to decorative art, and the women of our country are taking it up as a profession, but unfortunately they so far have been obliged to go abroad for study. It has, for some years, been the custom with London firms to receive women to study the art of furnishing and decorating, the apprentice to remain from three to five years with the firm; and, in consideration of the time and trouble taken by employers in conscientiously educating their pupil in the mysteries and technicalities of the profession, one hundred pounds premium is required. This seems an unreasonable exaction on the part of such firms, for the experiment of teaching women has proven that they are more apt than men; that they have a keener moral sensitiveness to beauty, a quicker eye for color; that their sense of artistic proportions is equal to man's: and that they have, with these qualifications, an unbounded and unflagging enthusiasm, which, carried into the pursuit of any trade or profession, and coupled with the persistent effort said to be closely akin to genius, is almost certain to bring success.

Women studying decorating and art furnishing are required to learn all about the various materials used for all kinds of artistic work. They must know the newest designs for wall papers of both home and foreign productions; they have to familiarize themselves with furniture of all kinds and styles, including mantel-pieces, the fitting up of grates with tiles and brasses: they must know everything knowable about carpets and draperies, art em-

broideries, bric-a-brac and about pictures, and hanging them, how to place marbles, in short—how to artistically cover the lifeless skeleton of a house with beauty and interest. More than all else, since it is one of the most important questions of decoration, they must study harmony of colors, about which little enough is yet known: for, notwithstanding the immense progress that has been made in art in the last four hundred years, our knowledge of the properties of color is still in its infancy.

But it is not of decorating as a profession that I want to write, though I do think that it is an occupation for which woman is pre-eminently fitted by reason of her love of home, her delicate manipulation, and her great patience in detail. But it is for the home-maker—the woman who has for the object aimed at the beautifying of her own home—that this article is particularly intended. The world is full of people with whom a lavish use of money is impossible: and the question of the hour is how to obtain artistic results at a low cost: how to do something durable and decorative in the production, at a trifling outlay, of articles of convenience and beauty. This is not impossible, though many with limited means suppose that it is: their idea of correct furnishing being the relegating of the work to a professional, who, as often as otherwise, puts in a collection of enormities and makes the whole place look like his own show-rooms, and of course unsuited to the family which is to live amidst these environments.

Undoubtedly there should be a harmony between the house, the furnishings and the people in the house: and this is only obtainable when one knows what one wants: when, through observation and thought, one has cultivated the eye and exercised a little common sense. Wealth does not always bring good taste: but rich people who will not take the trouble to study pure style themselves, would run less risk in giving a decorator *carte blanche*, than in juggling with the art themselves, in the way in which many people of means in these "faddy" days do. We have all been in houses of the wealthy where the furnishings had been collected and placed simply because fancied, and without their proper harmony, in regard to style or fitness, being in the least understood. Violations of this kind are perpetrated every day, and it is to be hoped the time is coming when wealthy people who will not study pure style for themselves, will place the decoration and furnishing of their houses in the hands of competent decorators, who will at least do better for them than they can do for themselves.

Art shops and dealers in household decorations, lead the mind, and a score of ideas and adaptations to one's own particular needs, follow in train. But we must apply the test of fitness and use to the novelties that attract with their prettiness and brightness, and we must determine how much of time or money they are worth. A little sifting soon creates a capacity for clear analysis. A woman can learn to distinguish, at the glance of an eye, between truth and trash: and in a work in which she has so much at heart as the beautifying of her own home, she should ever be willing to pay a fair compensation in time, labor, and thought where there is to be such value received.

Trumpery "nothings," in their uselessness, are dear even as gifts. "Decorate the useful, but avoid mere useless decoration," is a good motto, particularly for the moderately rich and the comparatively poor. Pretty and tasteful things are within the reach of all. It is a great mistake to believe such things are for the rich only, and to be bought with a price. One clever woman of my acquaintance, whose home, though inexpensively furnished, is most artistic, has made one of the most exquisite set of portieres I have ever seen. For this pur-

pose, she utilized some old rose silk curtains, which had been purchased at an auction sale, and which were faded. These she ripped and turned, and they were found to be as fresh and rich in color as if new. Next, she looked up some cast-off lace curtains, laundried them herself, cut out the heavy figures and appliqued them on the silk, after gracefully arranging them on that fabric. The result was a pair of beautiful portieres that attract the attention and command the admiration of every one. Their manufacture took time, patience and thought, as we can well understand, but there was the value received for all this. This woman has furnished her entire house along the same lines, She is in the habit of saying that it was furnished out of the rag bag, but it certainly looks as if the fairies did the furnishing.

"Nor is her-case a solitary one." We all know of other women who, by the exercise of good sense and such knowledge of art as they happen to have, cast a glamor over the most unpromising of rooms. They weave potent spells of witchery by making unusual arrangements of furniture, placing everything just where it belongs, where it is least likely to interfere with anyone's personal comfort, and where it shows to the best advantage. For instance, the black screen has a large pot of orange lilies, or golden foliage, to light its gloom: the tall mirror has a slight drapery of canary phoolkari: and a hanging, yellow-shaded lamp is fixed across a corner, so as to refle t a pretty window: a couch has fat yellow cushions: there are a few chairs not too elegant nor yet too cheap; fewer pictures, but these well hung, etc., etc.,—nothing valuable after all, but everything has that strange, undefinable charm of being just like the woman who owns it.

People cannot always create, outright, the place in which they are compelled to live, and they often find themselves in houses or rooms entirely opposed to their individual fancies. But that is their opportunity! As Lady Barker has said: "So long as a woman has a pair of hands, a work-basket, a hammer and brass tacks, she need not live in an actually ugly house." In this, I am sure Lady Barker is quite right. We cannot all have costly pleasures, such as really good pictures, statuary, bronzes, old silver, and old embroideries; but nothing save our want of knowledge, or want of taste, can withhold us from the daily, hourly delight of being surrounded by beautiful harmonious color. But a really good eye for color is not found as often as might be supposed. Indeed, there seems to be, generally, but little thought given to it; and yet the tonic effect of harmony in colors is, upon some natures, as strong as that of music.

Many of us have only a smattering of color-knowledge—just that little knowledge which is a dangerous thing. For instance, we know that a crude purple, a magenta and a blood-curdling shade of green are "really quite too dreadful," as a combination: but we are slow to understand how a certain shade of yellow wall paper cries aloud for velvet curtains of a special tone of russety green: we would be more likely to insist upon having hangings of that most bourgeoise color, peacock blue, because "blue and yellow go together, you know.'

There are a few cardinal principles of truly artistic decoration which every woman can know without apprenticing herself to a furnisher or draper, and which it is gross laziness or carelessness not to know.

The prime object of house-furnishing is to, through the senses, rest both body and mind; and the realization of this idea is attained by supplying impressions that are totally alien to those generated in the struggle in the business world for the almighty dollar.

A room should declare its purpose or nature of occupancy, and should also declare its logical relation to the

rest of the house. It should harmonize with those rooms which adjoin it, thereby exerting a pleasant influence upon the person passing through them. It should be an expression of the individuality of its inmates. The condition of individuality makes the room express the nature of the decorator. If the owner leads an intellectual existence, and loves soft lights or warm glowing colors, then if she does her own thinking she will, of course, betray this existence in the things with which she has surrounded herself. The rare literary contents of the book cases, the statuary, if she can afford it, (but all weird and symbolical effects,) rather than the presence of things hard and practical, reveal a poetic personality. Such a scheme admi s the widest possibilities of decorative art: is rich in a thousand practical suggestions. The individuality of the master and mistress of the house, whose tastes can be made identical, becomes the soul of the arrangement, transforming what might at first appear a heterogeneous gathering of disconnected parts into harmonious composition. The style is the decorator himself or herself, and not any conception of a dead past. The subject is worthy of the consideration of every house-maker. It is a fad quite worth pursuing, since, through the medium of the home, the coming generations will be taught to admire what is best in form and color.

It might be well to consider seriously what we are teaching in the way of "mother wit," as revealed in art. There has been much ridicule on our part thrown upon the "good old times," as being more uncomfortable and fanatical than the present. But it must be acknowledged that there is one thing in which our ancestors were superior to ourselves, and that is that decorative art, with them, did not mean an endless covering of the wall or ceiling spaces with a prodigality of patterns and colors which "swore at each other," as the French say. Neither did they try to hide their poverty with sashes and silken draperies, nor fling so-called Indian rugs here and there to hide grease spots. Homes made up of handkerchiefs and remnants were less common, and as emporiums of misfits were unknown. There was much less of that cheap splendor and mock luxury which abhors the use of furniture really well made, and chairs that are comfortable and solid, and bureau drawers that open and shut well. In fact there was a relish of those healthful ideas which, in decorating a home as in everything else, consist in appearing that which one is and not what one might wish to be thought. In this age when financial progress goes rapidly ahead of education in art, are we not in some danger of falling into degeneracy?

ALLEGHANY, Pa.

THE SAFEST SHIPS AFLOAT.

The safety and comfort of modern ocean travel as illustrated by the Canadian Pacific Railway Company's Ocean Steamships.

BY HENRY FRY.

THE Canadian Pacific Railway Company's ocean steamships are a credit alike to the builders, the owners, and the Dominion. They are, in every respect, a great advance on the ordinary screw steamship; so great that the public do not fully realize it. All three are exactly alike both in hull and engines. They were built by the Naval Construction and Armaments Company, of Barrow, under contract with the Canadian Pacific Railway Co., and were guaranteed to make 18 knots an hour on the measured mile, and 16½ on a 400 mile sea trip.

They are "twin screws," 485 feet long on deck, 51 feet beam and 36 feet deep; of 5,905 tons gross, with two pair of triple expansion engines working up to 10,000 horse power. They have all exceeded the guaranteed speed. The ***Empress of India*** made 19¾ knots on the measured mile, the *Empress of Japan* 18·91, and 17·85 on the 400 mile sea trip, and the *Empress of China* 19 knots on the measured mile, and 16·6 in face of a heavy gale, making 89 revolutions a minute and burning only 1·59 lbs. of coal per indicated horse power per hour. This is fast enough for any reasonable man who desires safety.

They are also fitted to carry 14 guns each, under admiralty survey, and can be armed as cruisers or troop ships in 48 hours, so that with their great speed they can either fight or run away from an enemy. They are also lighted throughout by electricity. They have accommodation for 180 first, 32 intermediate and 600 steerage passengers, and space for over 3,000 tons of cargo.

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They cost over one million dollars each, and are superbly fitted throughout, with a luxury never dreamt of by the builders of the early Atlantic steamships. But luxury, after all, is only a secondary consideration, and it may be interesting to point out in some detail the various improvements in these ships,—all tending to safety.

The dangers to which the ordinary screw steamship is exposed may be classed under five heads:—

1st. Fracture of main shaft, as in the case of the *City of Brussels*, *Circassian*, *Umbria*, *Sarnia*, and many other steamships.

2nd. Loss of screw or its fans, as in the cases of the *Peruvian* and *Sardinian*.

3rd. Loss of rudder or damage to it, as in the cases of the *Great Eastern* and *Alaska*.

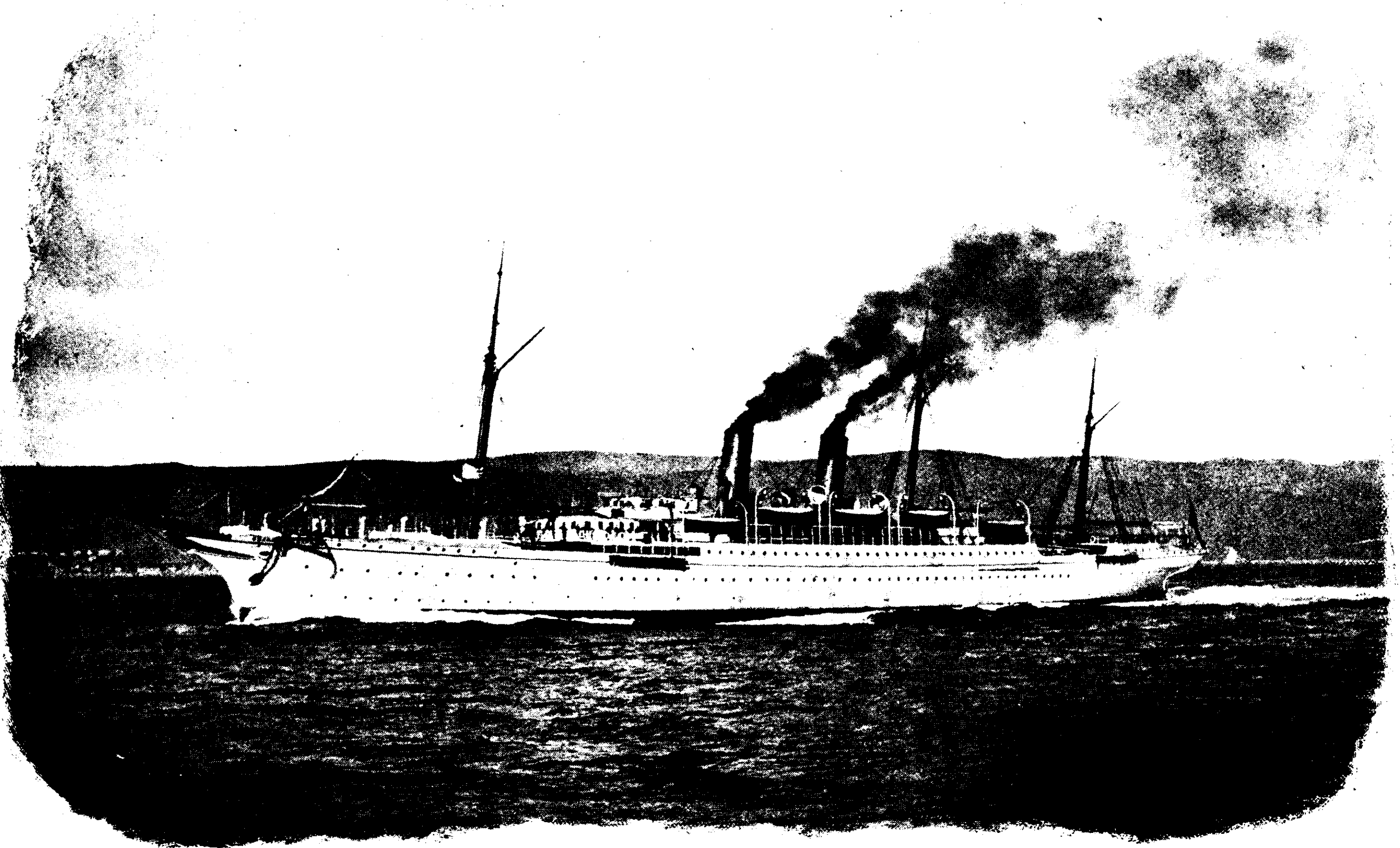
4th. Breaking down of the machinery, as in the case of the ***Aurania***.

5th. Collision between two ships or with rocks, as in the cases of the *Oregon*, *Idaho*, *City of Chicago*, etc.

The first four render a single screw steamship helpless, and she can only reach port by being towed, or by the very tedious process of sailing under her own canvas.

The fifth is usually fatal, as the cross bulkheads are generally too weak to withstand the pressure of a large body of water.

Now, the Canadian Pacific Steamships have all twin screws with two independent sets of engines and boilers, and in this fact is found their immunity from most of the dangers inherent in all single screw steamships; indeed it may be said to exempt them



SS. Empress of Japan, C. P. R. Line.

from the first four causes of danger, and even in the fifth case it may prolong the ship's life, or lead to her rescue.

How? Let us see! It is impossible in most cases to repair a broken shaft at sea, but in a twin screw the only effect is to diminish her speed about one-third, say from 18 knots to 12 or 13, and thus slightly prolong her voyage. As a matter of fact, the *City of New York* (a twin screw vessel), once made 382 knots with one screw cause it. But from all these accidents a "twin screw" is virtually free: or rather, if they do occur, the second screw is always available.

The third is also a very common accident and renders a single screw vessel perfectly helpless. The *Great Eastern* became unmanageable and slowly returned to Queenstown. The *Sardinian* transferred her passengers in mid-ocean and was towed to Liverpool; and the *Alaska* was assisted into New York by the *Lake Winnipeg.*

THE SALOON, SS. EMPRESS OF INDIA.

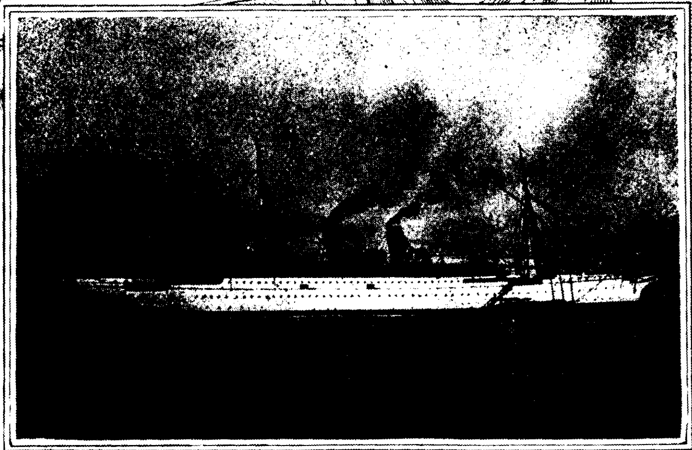
in 24 hours,—an average of nearly 16 knots per hour.

The second kind of accident is a very common one. The screw cannot be replaced at sea, but in a twin screw the effect is no worse than in the first case. Many things cause the loss of a screw. The *Scythia* lost hers by striking a whale: the *Peruvian* by striking field ice: the *Sardinian* by breaking the end of the main shaft. Floating timber, too, or a sunken wreck may

But in a "twin screw" it is possible to overcome even this disaster. By going ahead with one screw and astern with the other, from time to time as may be required, it is quite possible to make a fair course, sufficiently so to take the vessel near to her destination. She has also the great advantage of being able to turn a circle in about her own length—an immense advantage in a narrow channel, or when fighting an enemy, as every sailor knows.

EMPRESS OF JAPAN

EMPRESS OF INDIA



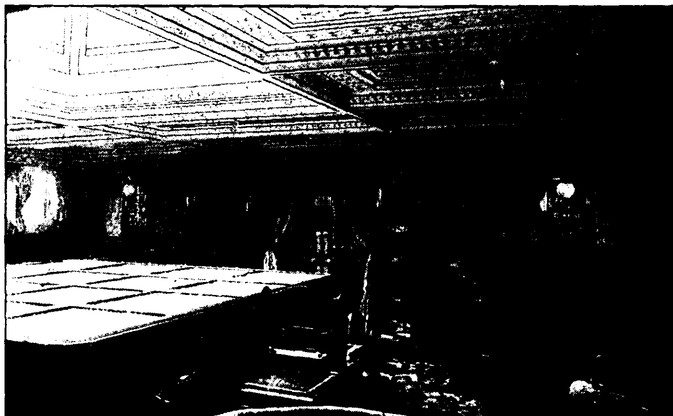
EMPRESS OF CHINA

The fourth is a kind of accident occurring through a variety of causes. Machinery can often be repaired at sea, as duplicates of many parts are carried; but in many cases it cannot. Cylinders crack; air pumps, piston rods, or condensers break, and the engine is rendered useless. The *Aurania*, of the Cunard Line, broke a connecting rod, which smashed the cylinder, and she drifted about until picked up by tugs. A paddle boat usually has two engines, and unless the main shaft breaks she can go ahead slowly with one engine, or even with one paddle; but in a single screw, if one cylinder is disabled the others are useless, because the steam passes from the high pressure cylinder through the intermediate into the lower and thence into the condenser. But in a twin screw the total breakdown of the engine only involves a diminution of speed; the chances of both breaking down at the same time are, of course, infinitesimal (It may be said that the accident to the *City of Paris*, a twin screw, is opposed to this theory, but that I will discuss later on.)

FORWARD CORNER IN GRAND SALOON, EMPRESS OF INDIA.

Collisions have recently become a source of terrible disasters to all iron ships, and here the utility of the twin screw, is seen. In a single screw, protection is sought by means of cross bulkheads and double bottoms. The former often fail for want of strength to resist the pressure of a large body of water, and they are pierced by doors which there is no time to close in a panic or in a great emergency. Double bottoms are a great protection when a ship strikes on a sandy, or level bottom, but they are no protection against sharp rocks. In collisions between two iron ships, one usually escapes, if she has a strong collision bulkhead near her bows, but the other sinks in a few minutes, as has been illustrated in the case of H. M. ships *Victoria* and *Camperdown*. The *Polynesian* and *Cynthia*, met end on near Longue Point below Montreal. The collision bulkhead saved the

former, but not the latter, which sank in a few minutes. The Cunard steamship *Oregon*, of 7,000 tons, was sunk by a miserable little wooden schooner which struck her in a vital part near the engine-room. Her bulkhead might have saved her, but it was pierced by sliding doors: the grooves were filled with small coal and the doors could not be closed in time.

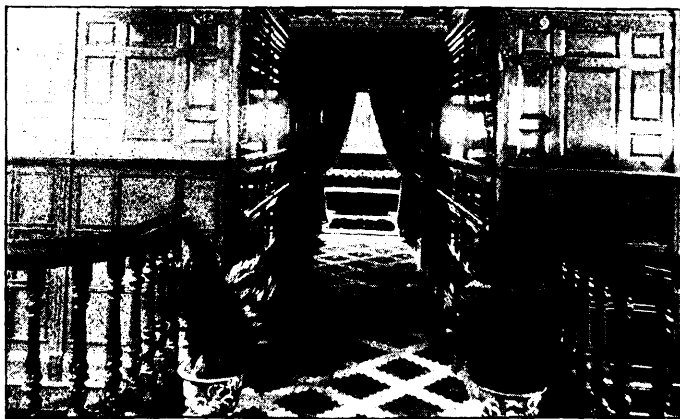


THE LIBRARY, SS. EMPRESS OF INDIA.

The Canadian Pacific Railway ships have two independent sets of engines and boilers, and have *central longitudinal* bulkheads running from the keels on to the main deck. The effect of this is fourfold: 1st, it cuts the space into halves; 2nd, it strengthens the transverse bulkheads; 3rd, it effectually separates the two sets of engines and boilers: and 4th, it gives the ship greater longitudinal strength. In fact it is possible to divide the whole ship into sections and thus render her unsinkable, without seriously interfering with either the engines, boilers, passengers or cargo. The *Empresses* have eleven bulkheads: six have no doors: the other five have water-tight doors with patent releasing apparatus.

There remains to be considered one other danger, common to all ships, and perhaps the most terrible of all to landsmen—that of fire. The great advantage of an iron ship, and especially of a "twin screw," over a wooden ship, is that the fire can be confined to one section and drowned out with water, or steam from steam pumps or direct from the boilers, without the passengers even being terrified by smoke.

Here it may be well to describe the extraordinary accident which befel the *City of Paris*, which is a "twin screw." She was being driven very hard to make a record; but such an accident is without a parallel, and may not happen again for a century. The

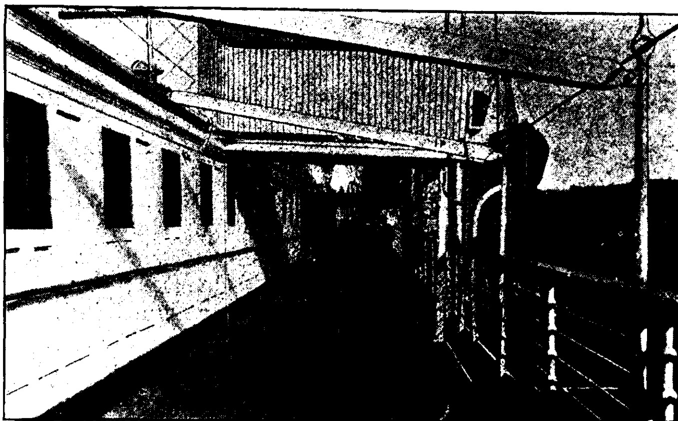


ENTRANCE TO SPECIAL STATE ROOMS AND LIBRARY, SS. EMPRESS OF INDIA.

immediate cause was the breaking of the starboard main shaft near the screw, when it was making 80 revolutions per minute. This, of course, caused the engine to race. A connecting rod, 11 inches in diameter broke, and, acting like a huge flail, smashed the two standards (weighing 14 tons each), and the low pressure cylinder (weighing 45 tons), broke off the condenser pipe, and made a hole in the after bulkhead, thus flooding the engine-room. All this would not have stopped her or imperilled her safety, had not flying pieces of metal made three ragged holes in the longitudinal bulk-head, thus causing both engine-rooms to be flooded and driving all the engineers on deck. The forward bulk-heads, protecting the boilers, remained intact and kept the ship afloat. She was towed to Queenstown: the condenser and injection pipes were plugged and the water pumped out; then she proceeded to Liverpool with her port engine, unassisted. On docking her, the *lignum vitæ* bushing of the after bearing was found to be worn away; the end of the shaft had dropped seven inches and been fractured.

ON THE PROMENADE DECK, SS. EMPRESS OF INDIA.

There has always been difficulty in lubricating the after-bearing of the shafts of screw steamships. The late John Penn of Greenwich, found that strips of *lignum vitæ* inserted in the bearing, when acted upon by salt water and friction, produced a natural lubrication. It was this *lignum vitæ* that had worn away in such an extraordinary fashion. The writer is not an engineer, but he would suggest that the facts seem to indicate that the shaft must have been originally slightly out of plumb. This was the case with the *Peruvian*, which, on her trial trip, melted the brasses and damaged the shaft. The fact remains that the *City of Paris* escaped under circumstances in which, according to the official report to the Board of Trade, "No ordinary vessel could have remained afloat after such an accident."

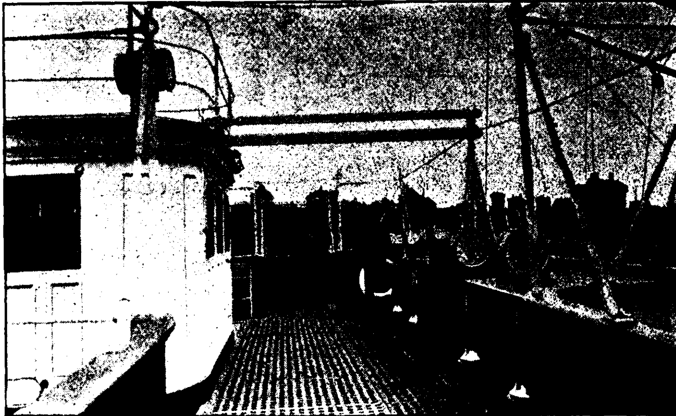


FULL VIEW OF PROMENADE DECK, SS. EMPRESS OF INDIA.

So much for the safety of twin screws.

But these beautiful ships of ours have other attractions. Those who, like the writer, have been in the habit of crossing the Atlantic twice a year for nearly a quarter of a century, will appreciate them fully: but some may now be only anticipating their first sea trip.

In the early Cunarders, the little "State-rooms," so amusingly described by Dickens in his "American Notes," were only six feet square; they contained two bunks like coffins, two wash-basins and jugs, the latter having a knack of pouring their contents over your bed, two little mirrors, two brass pegs, and a seat. Of ventilation, there was practically none, except on very fine days, when the "sideports" could be opened. The peregrination of one's portmanteau, the gyrations of one's hat, and the swing of garments on the pegs were maddening, especially to those suffering from sea-sickness. No books or hot water could be had, nor even your light be extinguished, without bawling for "steward" perhaps a dozen times, when the reply would be in the distance, "What number, sir?" (A wag on board the *Canada* once changed all the boots late at night, and the scene in the morning was indescribable.) If you wanted a smoke, you had to go to a wretched little place over the boilers, called the "fiddle," where the stokers were hoisting the ashes, and where you often got soused with salt water. There were a few books, and very good ones too, but they were kept under lock and key, and a special application was necessary to get one. There was no piano, or organ, or bath-room; the only promenade was on top of the deck-house and only sixty feet long, and at meals you had to climb over the backs of long benches to get to your seat. The Allan boats had larger saloons and a better promenade, but the saloons were right aft, where the "racing" of the screw was often extremely disagreeable.



VIEW OF BRIDGE, SS. EMPRESS OF INDIA.

Now mark the striking contrast to all this in the *Empresses*. The state rooms are large and well ventilated by fans and patent ventilators, which always admit fresh air, but exclude the sea. The beds fold up as in a Pullman car, and by day your room is converted into a cosy little sitting room with a comfortable sofa. Instead of the rattling jugs, you turn a tap and get a supply of hot or cold water; you touch a button and your steward instantly appears, without a word being spoken. Neat wardrobes enable you to banish your portmanteau or trunks to the baggage-room. You turn a switch aud you get an electric light; and if you want a nap, or wish to retire early, you can turn it off in a moment. If you have plenty of spare cash and are willing to part with some of it, you can have a "day cabin" on the upper deck, where you can entertain your friends, or enjoy a game in privacy. You can have the luxury of a morning bath, and a pro-

menade 250 feet long. To diminish sea-sickness, you dine in a decorated saloon near the centre of the ship. Revolving arm chairs replace the benches; and electric lights, the candlesticks with their lashings. To allow you to enjoy a cigar after dinner, a luxurious smoking-room is provided; or, if you prefer to read or write, there is ready for you a pleasant reading room, with plenty of good books: the ladies have their own handsome boudoir, with a piano. As for the table, it is sufficient to say that it is provided by the C. P. R. Co. You can have wine or ale or toddy—all free of duty. Concerts, chess, drafts or whist, will enliven your evenings up to 11 p.m., and Divine service is held every Sunday morning.

Abundance of pure oxygen will refit you for the cares of city life: and the trip by land and sea is the best in the world to furnish that oxygen. You can step into a Sleeping car at Montreal, Toronto, Quebec, St. Johns, or Halifax, and land in Japan in fifteen days; and thoughout the entire journey enjoy the best of food and attendance, and luxuriate in every comfort amid ever changing scenes of beauty. Or, if you have the time to spare, you can enjoy a trip around the globe for a very moderate sum. Leaving the snows of Canada, say about the beginning of a new year, and after visiting the most interesting, polite, and progressive people of the East, you will land by the Company's steamers, in Hong Kong—the most prosperous little island in the world—sixty years ago a barren rock; but now a great depot of trade, owning thousands of craft, and a bank with one hundred millions of assets. They will there transfer you to one of the splendid " P and O " ships, which will carry you, *via* Singapore and Penang, to the lovely island of Ceylon; thence *via* Aden to Egypt, where you can enjoy the finest of winter climates; then on to Brindisi, and by rail through Naples, Rome, Venice, Milan, Turin, Paris, and London, or by sea to Malta Gibraltar and London, and thence, *via* Liverpool, you will land at New York, Boston, Halifax, St. John, Quebec, Montreal, or Toronto, in the early spring and in time for the opening of navigation, and all with a safety and comfort far beyond what was known only a few years ago.

To show what can be done in the way of speed, it is sufficient to quote the great feat performed by the *Empress of Japan.* Leaving Yokohama on the 19th of August, 1891, she arrived at Victoria on the 29th, or in 9 days, 19 hours, and 39 minutes, thus making an average of 18½ knots per hour, the distance being 4,374 knots. The mails left Vancouver by a special train at 1.08 p.m. and reached Brockville, 2,802 miles distant, on Sept. 1st, at 9.03 p.m. or in 76 hours and 55 minutes, and New York, 360 miles further on, at 4.43 a.m., on the 2nd. or in an additional 7 hours, 2 minutes. The mails left port by the *City of New York* at 5.10 a.m. and were delivered in London, to the astonishment of all England, on the morning of the 9th, only 21 days from Yokohama. The official time *via* Suez was 43 days.

Such, without exaggeration, are our noble Canadian Pacific Steamships. Long may they run in their peaceful career, the pride of Canadians, whose flag they carry. These steamers will carry the produce of our mills, and our farms to the far East (or west), and bring back the tea, the silk, the rice, and the artistic treasures of the Orient.

It only remains to add that the writer has no interest, directly or indirectly, in the company, and only writes to point out to Canadians and others, the facility with which they can now enjoy a most delightful trip in one of the noblest ships afloat.

SWEETSBURG, QUE.

SANDY GREY.

BY ALAN SULLIVAN.

Sandy Grey! Sandy Grey!
Where are the rapids of Sandy Grey?

Some ten miles up from the Georgian Bay,
Where the hurrying yellow Muskoka flings
Its waters with resonant thunderings,
Fretted and whipped to a foam, like snow,
Some twenty-six feet on the rocks below;
And whirls in an eddy so strong and deep,
That the best canoe-man does well to creep
By the twisted roots on its steep, bluff side
To the foot of the flashing timber-slide;
These are the rapids of Sandy Grey,
Some ten miles up from the Georgian Bay.
But whence is the name? I hear you say:—

Twenty years ago, ere the pine was cut,
And no foreman would look at a stick, whose butt
Went two feet or less, while the big trees stood
And lorded it over all other wood,
The current above for a mile was brown,
As the logs came steadily drifting down,
Till they stuck and tightened and piled and jammed
In the gut, where the narrowing stream was dammed;
Higher and tighter and stronger grew,
Till the river but trickled and filtered through;
And the water backed up to the shallow lake,
Backed up from the dam which it could not break.
The drivers stood high on the bare rock shore,
And noted the river's lessening roar,
And the heaving tremble and creak and groan
In the jam, as log after log was thrown
On the mound of timber; and, stone by stone,
The bed of the river below grew plain,
And the rocks once sunken shewed up again.
Then the pipes came out, and the sweet weed burned
In a dozen bowls, and the talk was turned
To similar jams, and the means they'd tried
To loosen the logs; till somebody cried—
Look—there, on the river—look, boys, I say—
God! look at that fool of a Sandy Grey.

They looked, and there, where the quick stream swirled
On the lip of the fall, and the spray was hurled
Up high in the air, to descend like sleet—
A man had crawled, set his spike-shod feet
On the key of the jam, and his axe-head made
A silver halo of light that played
In circling flashes, and rose and fell
With the swing that a woodsman knows so well.
Careless of rapids and life and death
He hewed, and the drivers with bated breath
Spoke but in whispers; then, staring, dumb,
Waited and watched for the end to come.

It came—when the deep yellow, brown-edged gash
Grew a little wider; a short, quick crash
Told the deed was done: and he turned and glanced
At the trembling logs, and the stream that danced
On the curving slide; then he leapt and missed,
And fell where the face of the dam was kissed
By the river's bright lips; no chance to swim,
For the logs came hurrying down on him,
And the river, now strong from its unsought rest,
Set its shoulders under the jam, and pressed
And heaved, till the logs in the air were tossed
In wild confusion, like matches lost
In a miniature rill; and the man was sucked
Down into the deeps, as a fly is plucked
From the face of a pool by a rising trout;
And he was not found till they searched about
Near Flat Rock rapids, two miles below;
And then he was torn by the sharp rocks so
That they hardly knew the disfigured clay,
For the man who had once been Sandy Grey.

And now when you hear the thundering tone
That up in the night from those falls is thrown,
And spreads far out on the still, calm air
Till it sounds like the sound of an angel's prayer,
You will surely agree with me, and say
That the river is mourning for Sandy Grey.

WILLIAM RALPH MEREDITH, M.P.P., AT HOME.

BY. THOS. E. CHAMPION.

FEW more charmingly picturesque spots are to be found in the city of Toronto than that in Rosedale where stands the handsome house on Lamport Avenue occupied by the leader of Her Majesty's Loyal Opposition in the Provincial Parliament. Crossing the Sherbourne street bridge, which a little distance north of Bloor street spans the lovely and romantic Rosedale ravine, and following the tracks of the street railway, the house is soon reached. It is a modern residence, looking towards the city, and, happily for its occupants, has, in whichever direction one may look, green fields and trees now clothed in the most luxuriant foliage.

W. R. MEREDITH, M.P.P.
Leader of the Ontario Opposition.

Bright and cheery as are its surroundings, the interior of the house is not less so: everything betokens an air of comfort, while there is something which strikes one as specially homelike when the comfortable library is reached. Mr. Meredith, on your entrance, greets you heartily, tells you you are welcome, and before many moments are past you feel that you are so. From another room comes the sound of music, laughter, and of young people's happy voices, and at once it is learned that however formidable Mr. Meredith may be as an opposing counsel in the law courts, or as a militant politician on the platform, he is not feared in his own household.

Mr. Meredith is the son of the late Mr. John Cook Meredith, an Irish gentleman, who was a B.A. of Trinity College, Dublin, and who came to this country in 1834, with the intention of farming. He settled in the township of Westminster, and there, on March 31st, 1840, the subject of this sketch was born. Mr. Meredith continued farming for several years, but eventually relinquished that occupation and was appointed Clerk of the Division Court in London, Ontario, which post he occupied until he met his death, some few years ago, by the overturning of a steamboat upon which he was a passenger, on the Canadian Thames. His widow still survives, and resides

in London. Mr. W. R. Meredith passed his very early years on his father's farm, and in 1848 was sent to the Grammar School in London, where his parents had then taken up their residence. Of this Grammar School, the Rev. Benjamin Bayly, B.A., an Anglican clergyman, and a graduate of Trinity College, Dublin, was head master. Very probably, the fact that Mr. Bayly was a member of his own *Alma Mater* influenced Mr. Meredith's father not a little in choosing the school to which to send his son.

Mr. Meredith remained under Mr. Bayly's charge for several years, and subsequently entered Toronto University, where he graduated as LL.B., in 1866. Twenty-three years later, in 1889, at the same time that a similar honor was conferred on Sir Oliver Mowat, he was created LL.D., a distinction alike honorable to the University and to its recipient, he being one of the most distinguished of her sons.

In 1856, Mr. Meredith entered the office in London, as articled pupil, of the late Mr. Thomas Scatcherd, representative in the Dominion Parliament for many years of the constituencies of West and of North Middlesex. He was called to the Bar and admitted as a solicitor in 1861, and almost immediately entered into partnership with Mr. Scatcherd. This partnership continued until the death of the latter gentleman in 1876. Mr. Meredith was created Queen's Counsel for Ontario in 1875, and "took silk" for the Dominion in 1881. Until 1888 he resided in London, and practised in, or, to use the technical term, "went" the Oxford and the Western circuits. He devoted himself to both civil and criminal business, and soon became known as an accomplished pleader.

In 1872, Mr. Meredith determined to try to obtain a seat in the Ontario Legislature, and with that object in view offered himself as a candidate to the electors of the Forest City. He was not, though, to be allowed a "walk over," for he was opposed most vigorously by Mr. James Durand, who was a pronounced Reformer. However, the victory lay with the Conservatives, Mr. Meredith gaining the seat, but only by the narrow majority of forty-two votes. But, like Mercutio's wound "it was enough," and Mr. Meredith attained the object of his ambition. In 1875, there was another contest with the same opponent, when Mr. Meredith was again at the head of the poll with an increased majority of one hundred and forty-one. Nothing succeeds like success, for though at the election of 1879 he had to fight for his seat against Mr. James Magee, his majority was no less than four hundred and forty-three. When Parliament was dissolved in 1883, no one could be found sufficiently intrepid to try to wrest the seat from him: and to the satisfaction of his party, and doubtless to his own (for, after all, members of Parliament are but human), he was returned by acclamation. But when he had again to appeal to the constituency in 1886, he was opposed by a labor candidate, a Mr. James Peddle, a working cabinet-maker, but he succeeded in holding his seat, though his majority was reduced to about two hundred. In 1890, once more he was elected without a contest, a satisfaction that is not to be afforded him in 1894.

On the elevation of Mr. Matthew Crooks Cameron, the then leader of the Opposition, to the judicial bench in 1879, Mr. Meredith was by the all but unanimous voice of his party, both in the House and in the country, called upon to become the leader of the Conservatives in the local Parliament, and in that position he has continued since.

Some amusing stories are told illustrating Mr. Meredith's ready wit and imperturbable *sang froid* in the face of interruptions, when speaking in public. One of these is to the effect that, on the day before the polling, on the occasion of his first contest, when making his final appeal to the electors,

a man in the crowd addressed the not very pertinent enquiry to him, "Does your mother know you're out?" Of course there was a laugh, which was at once turned into a roar of applause by Mr. Meredith's reply, "Yes, my friend, and by this time to-morrow night she will know I am in." There is another, perhaps, not quite so amusing, but at any rate well worth relating. At one of his election meetings, a notorious "rough" shouted at him the meaningless "catch" of "Get your hair cut!" Nothing disconcerted, Mr. Meredith, looking full at his would-be tormentor, quietly replied, "It seems to me I once had something to do with getting *your* hair cut." Mr. Meredith had recognized the interrupter as a man whom he had once been instrumental in convicting of an offence against the law.

Mr. Meredith married a daughter of Mr. Marcus Holmes, of London, Ontario, and they have several children. By her charming presence, and ever-present courtesy, Mrs. Meredith has done not a little towards her husband's success, both socially and politically.

Among other appointments held by Mr. Meredith is that of Vice-Chancellor of the Western University in London, while he has been a Bencher of the Law Society since 1872. In 1876 he was appointed city solicitor for London, and on March 1st in this year was also appointed counsel to the corporation of the city of Toronto.

He is a member of the Anglican church. He is a strong supporter of the entire separation of church and state. We think we may safely make that statement of his views, without being accused of touching upon political topics.

Mr. Meredith has visited Europe on more than one occasion, and has also travelled a great deal on this continent. He has served as a private and as a commissioned officer in the Canadian militia. For some time he was in the 7th Fusiliers, finally retiring from military life, as he laughingly tells you, "without a pension."

In concluding this sketch, I think we cannot do better then quote the encomium passed upon Mr. Meredith by a political opponent, the Honorable J. M. Gibson, at the Centennial proceedings held in Toronto, in describing him as the "most efficient and best equipped leader of an Opposition anywhere to be found."

THE OTTAWA CONFERENCE.

BY J. LAMBERT PAYNE.

THE Conference which is to be held in Ottawa commencing June 21st will be one of the most important gatherings in which Canada has ever taken part. More than that, it will be an event of far-reaching Imperial significance, as marking the first practical step towards the closer union of world-wide British interests. It will be a meeting of representatives from Britain's three chief colonies—Canada, Australia, and the Cape of Good Hope—coming together from the furthest separated parts of the earth to pave the way for more intimate trade relations and all that is involved in a better knowledge of each other's wants and supplies. With them there will also be a commissioner from the Home Government: so that, in a sense, the Conference will have an Imperial character. An impulse of patriotism must move every Canadian heart as it is realized that this event so full of promise was inspired by one of our Dominion statesmen, and is to take place in our own capital.

This Conference grew directly out of Honorable Mackenzie Bowell's mission to Australia in the latter part of last year. That visit to the Antipodes followed as a reasonable sequence to the establishment of a line of steamers to ply regularly between Vancouver and Sidney. When, however, the Minister of Trade and Commerce had spent a month in the colonies he found it most difficult to make anything like satisfactory progress in dealing with the distant Governments comprising the Australian group. They covered a very wide area, and the actual separation by distance was intensified by the friction growing out of tariff legislation and long maintained rivalry in various phases of commercial and inter-colonial life. That is to say, not only would much time be taken up in visiting each legislative centre, but little could really be accomplished with any one colony until it was known what other colonies were likely to do. Joint action was absolutely necessary: and this could not be had without bringing the parties together. It was first proposed to have a meeting of the delegates in Australia: but several of the legislatures were in session at the time, and this proposition was found impracticable. Mr. Bowell was not the man to let the matter drop, however, or to be long undecided. In effect he said: "If you can not meet me here, then come to Canada, where all the matters which concern us collectively may be carefully discussed." Four out of the seven colonies gave their acquiescence at once, and with that promise Mr. Bowell returned to Canada. Soon after his return, formal invitations were sent to the Imperial Government, the Australasian Colonies, Fiji and Cape Colony, to send representatives to Canada in June of this year.

At the moment of writing, favorable replies have been received from the Imperial Government, the colonies of New South Wales, Victoria, Queensland, New Zealand, South Australia and Cape Colony. Their delegates will convene in Ottawa about the 21st of June.

The scope of the Conference is not limited within fixed boundaries. It may be safely assumed, however, from the terms of the invitation sent to the parties concerned, that three things in chief will be considered:—1st. The development of inter-colonial trade; 2nd. The laying of a Pacific cable between Canada and Australia: 3rd. The

proposed Imperial highway from England, across Canada to Australia and the East. These three themes will undoubtedly suggest others of a cognate character: but it is not my purpose to speculate. Were there no other matters hinging on them, these would still be sufficiently weighty to mark the Conference with very great importance. In the first place, the question of trade relations involves a matter of great moment to the Australasian Colonies which can only be dealt with jointly. Unlike Canada, they cannot give preferential treatment to any outside country, although having the power to discriminate against each other to an unlimited extent. This bar in their respective constitutions prevents them from making a bargain with Canada on the basis of mutual concessions, no matter how anxious they may be to do so. For example, if they made lumber free in return for some corresponding freedom in our market, the United States and other lumber exporting countries would be able to take advantage of the arrangement without giving anything back. This disability would lie at the very threshold of all trade discussions, and its removal would be one of the prime objects of the Convention. This would carry with it the means in detail by which reciprocal trade could be stimulated, and would pave the way for a careful review of the needs of each. All this applies with equal force to South Africa.

The Pacific cable project was first mooted by Sanford Fleming, Esq., C.M.G., of Ottawa, and has been advocated by that eminent engineer with unremitting zeal for the past twelve or thirteen years. As a practical necessity, it has sprung into first-rate importance by the establishment of the line of steamers between Canada and Australia. At the present time, a message from this country to the Antipodes must cross the Atlantic to England, thence by numerous land and cable lines to Egypt, and through the Red Sea and Indian Ocean to Bombay: thence to Singapore, to Java, to the extreme north-eastern coast of Australia, and over the great desert of that continent to the great commercial centres of the colonies—crossing three continents, and covering a total distance of nearly 20,000 miles. For a short dispatch, this means a cost of about $5 per word, and to make matters worse, the line of communication is controlled by a monopoly which has wrung millions of dollars from the Australian colonies during the past fifteen years, and made for itself a vast fortune. The Eastern Extension Company owns 18,000 miles of telegraph lines, extending to Egypt, India, and China, and from the subsidies and guarantees which they have drawn from the Australasian colonies alone, it has more than paid the entire annual working expenses of that vast system. Last year the Company added upwards of $500,000 to a reserve which already amounts to more than $3,500,000, after paying a dividend of 7 per cent. on heavily watered capital. Australia wants relief from this oppressive monopoly, and Canada wants direct telegraphic communication across the Pacific at reasonable cost, as the necessary complement of the communication now had by a first-class line of steamers.

For military reasons, Great Britain also requires a cable to the East, the land portions of which shall be entirely under her control. The existing line passes through several foreign countries, and in the event of war could be interrupted at many points. Thus, it is proposed that the Pacific cable should be laid at a cost of about $8,000,000, on a joint guarantee by Great Britain, Canada, and the Australian colonies. The scheme in general has been commended by the Honorable Mackenzie Bowell, as Canadian Commissioner to Australia, and by the recent Australasian Postal Conference in New Zealand; but it has, and will

have, the strenuous opposition of the powerful monopoly controlling the existing lines from England to the Antipodes.

The third matter with which the Conference will deal is of paramount importance to the Dominion. Canadians are familiar with the facts attaching to the proposed fast Atlantic steamship service; but they have not generally grasped the full meaning of all that is involved in the success of that great undertaking. Mr. James Huddart, with whom the Government has entered into a provisional agreement, is the owner of the Canadian-Australian Steamship Line, and by co-operation with the Canadian Pacific Railway, he proposes to make Canada the new and chief highway between England and Australia. This would mean much to us, and it would mean more to Australasia (more particularly to New Zealand), in that it would shorten the time for receiving and sending mails, and bring the colonies at least five days nearer to the Imperial centre. In these times, five days means much. It would also obviate encountering the oppressive heat of the Red Sea, and the dangers from disease and international trouble which constantly menace that route. The Home Government has been petitioned to subsidize the proposed service, and in reply has asked that the matter be left open until the Ottawa Conference has been heard. It requires no particular perspicacity to see that with the grace of the Imperial Government in tangible form, the great enterprise which Mr. Huddart has in hand will be carried to success. Canada will then occupy a new position in the eyes of the world: but this can only be brought about after much careful work and wise planning: for the fast Atlantic service will have to be launched in the face of bitter opposition from the powerful Peninsular and Oriental Steamship Lines, now controlling the traffic between Great Britain and Australia.

Of the personnel of this Conference, I do not care to write at the present moment, for the reason that there is some uncertainty as to the names of two or three of the Australian representatives. It may be assumed, however, that the Home Government will send one or two delegates: Victoria, three: New South Wales, two; Queensland, two: New Zealand, one; South Australia, one, and Cape Colony, two. In addition to these, Canada will probably nominate two or three representatives, and the Chamber of Commerce of Honolulu has, on the invitation of the Canadian Minister of Trade and Commerce, announced its intention of sending a delegate. In all cases, the men thus far chosen are from the first rank in affairs of State and Commerce: and Canada will welcome them, not only because they personify the bond of kinship which unites the scattered branches of the Empire, but because they come with a view to shaping that union into concrete form by the tangible ties of trade and mutual interests.

GABLE ENDS.

A SILLER WEDDIN'.

I'll wager, Wullie, ye didna ken 'at Betty an' me wis mairit again. I dinna ken whether it's a' right or no. I'm whiles thinkin' it maun be juist anithir o' thae lawyure's dodges. But it seems, by what Mrs. Jamieson wis tellin' Betty the ither day, that aifter ye hae been mairit five an' twenty year' ye hae tae mak anither weddin'.

I had niver heard a' the like afore, an when Betty cam hame an tell't me that we had tae "hae anither weddin'," I wis speechless, dumfoondered ; for I thocht she wis gaun ree a'thegither.

"Na, Betty, woman," I says at last, layin' doon me paper, "what's wrang wi ye?"

"Sandy," says she, "there's naethin' at a' wrang wi' me. It's as true as deith 'at I'm tellin' ye—we hae tae be mairit ower again"

"Mairit ower again?" I says. "My certy but that's a bonny story! Warna we mairit firm an' fast by auld Donald Anderson, him 'at's deid noo this ten year' syne?"

"Aye."

"An' didna I gie him his hauf-a-croon when he wis dune wi' the job?"

"Aye."

"An' didna I gie ye the marriage certeeficate i' yer ain keepin'?"

"Aye."

"Weel, an' what mair d' ye want than that, Betty?"

"Aye, but Sandy," says she, "dinna ye ken 'at next Wednesday we will hae been mairit five-an'-twenty year'?"

"Aye," I says still lookin' at her vera curiously.

"Weel, ye may be thankfu' I gaed ower tae Mrs. Jamieson's this mornin', or it's vera likely baith o' us wad hae suffered wi' thae lawyures. Mercy me, I kenna what the worl's comin' tae at a'."

"Betty," I says, "I'll niver believe sic nonsense. There's auld Sandy Tamson an' his wife, Meg, 'at's been mairit weel nigh this forty year', an' they haena gotten mairit again ; an' Donald McNab, an' Wullie Campbell, an' hauf a dizzen ithers, wha haena gotten mairit again."

"It maun be a new law," says Betty, "for David M'Phee, it seems wis mairit again last Thursday, because him an' Leezie had been mairit five-an'-twenty year'."

"Weel," I says, "it maun be some quirk o' the law, or else David M'Phee wad niver hae gotten mairit again : for I'm sure he disna think ower muckle o' auld Leezabuth. It's a wunner he didna be aifter ane o' Sandy Tamson's dochters, or some o' the ither douce neebor lassies."

"Hoots man!" says Betty, "ye dinna understan' it at a'. Ye canna marry onybody but yer wife."

"I see nae great use o' haein' a weddin' then," I says. "I'm thinkin I'll hae tae see the meenister aboot it, however. Surely he kens a' thae things. But it maun be a graun affair, Betty, afore they ca't a siller weddin'. I doot it'll cost a bonny penny."

"Losh, Sandy," says Betty, "ye maun ken every ane 'at's speirt has tae bring a siller present. Cheenie winna do at a' min ye—but siller. Certies I'm thinkin' we'll hae tae speir a gude wheen o' oor freens."

"Certainly, Betty," I says, "or they'll maybe no think it vera neeborly o' us."

"It's no that" says Betty; "the mair we speir, the mair presents it'll be."

But tae mak' a lang story short, I at last set oot for the meenister's. Noo, ye'll no hinder him tae be awa' for a fortnicht's veesit wi' his aunt an' so I wis forced tae gang tae anither meenister wha sometimes occupees oor poopit when oor ain meenister is awa'. I askit him if he had iver heard o' sic a thing as a siller weddin'. He said he had. So then I tell't him 'at Biddy an' me were tae hae ane on Wednesday, but as oor ain meenister wis awa', I wad be muckle obleeged tae him if he wad perform the ceremony.

"Ceremony!" says he, "ye dinna need ony ceremony, man."

"Losh me! nae ceremony!" I says. "I'm dootin' ye're no vera orthodox." "Ye see it wadna be valid withoot a ceremony," I says, an' wi' that I left him.

But so as no tae be beaten i' me business, I sent a letter tae the meenister o' the next parish, sayin' that oor ain meenister wis awa', an' askin' him if he wad be sae obleegin' as tae come an' marry an elderly couple on Wednesday. An' then I gaed hame tae mak' preparations for the weddin', so as tae hae the hoose lookin' as weel's possible, ye ken.

Betty wis aye a tidy woman, but for sic a wark as she had noo among the dishes an' a'—I niver saw the lik' o't. Everything wis turned upside doon She wad gang first at ae thing and then anither, until at last I couldna bide tae be i' the hoose, it seemed sae new-fangled.

At last the day cam', an' I closed the shop twa hours afore the time, so as tae hae time tae gie mysel a bit tosh up. It wis vera fortunate I did sae, for the meenister cam' gey early. It seems he had tae attend a meetin' o' the elders that evenin', and so we had to be mairit immediately, or no at a'. Betty wis sairly flechtit about it, as nane o' the guests had gotten here yet, but I explained 'at we couldna help it, as the business o' the kirk had tae be attended tae, an' aifter a wee, got her preswaded tae gang on wi' the ceremony. Maun, Wullie, I wish ye had seen Betty that nicht. I canna describe her—she had sae mony falderals an' veeriorums, —but she wis the best-dressed womon at the pairty, an' that's sayin' a gude deal, Wullie. I dinna think I iver lookit sae weel mysel' either as I did that night wi' me hauf-dress suit, o' the vera best braidcloth, for which I paid eicht pund an' saxpence only last summer, an' which has niver been on mair than twice or thrice since. Ane aifter anither o' the guests wad say, as they were shakin' hauns wi' me, an' wishin' me much joy: "Weel, weel, Mr. Broon, ye look a dizzen year' younger than ye did;" or, "Dear me, Mr. Broon, I really think ye maun be renewin' yer age; I niver saw ye lookin' sae weel before."

But as sune as a' the guests had arrived, we a' sat doon tae the tables, an' yon *wis* a table, Wullie, if I do say't mysel'. For what wi' cookies, ginger-snaps, an' curran'-buns, an' what wi' ae thing an' anither, it wis a table fit for a king, as Mr. McAllister said. Mair than that, min' ye, I had ordered the boy tae bring up twa pund o' oysters, an' a' that wis in addition tae the ordinar' short-bread an' minced collops an' the like.

But I wis vera sorry about the bride's cake, tho'. That mornin' I gaed doon tae the baker's shop tae pick a gude ane. Nane o' them lookit sae fine, I thocht, as ane i' the window, and sae I tell't the laddie I wad tak' that ane, I thocht. Wullie, ye wad niver hae kent but yon wis really a cake—fower storey high, an' covered wi' carvey sweeties as thick's I don't know what—but when we cam' tae cut it, we fand it wis made o' mud. It seems it wis what they ca' a dummy-cake, juist for an adverteesement, ye ken, an' it bein' the boy's first day i' the shop, he couldna be expectit tae ken ony better. The laddie an' me had a fine rippit ower the heid o't the ither day, afore I got me money frae him again. Betty wis vera vexed aboot it, but ye see it wis juist a mistake, an' couldna be helpit in ony way. I wis gled tae see it didna spoil the dancin' i' the least. We juist had a wheen gude auld-fashioned reels—nane o' yer new-fangled waltzes an' notions, and then a' gaed hame, declarin' that David M'Phee's weddin' wis naethin' compared wi' oors, an' wishin' us mony a year o' happiness thegither. Betty an' me hae been fixin' up the hoose wi' the presents iver since. But I winna say onything aboot them till ye see them, only that they're juist perfectly grand. We hae been thinkin' about haein' anither weddin' next year, since this ane wis sic a success; but, of coorse, we micht change oor minds afore that time, ye ken.
—Sandy.

PHOTO-TOPOGRAPHY ON THE ALASKAN BOUNDARY

The application of photography is confined mostly to pictorial effect. However, its usefulness has been applied in another direction also, and that is, for obtaining the necessary data for making topographical maps, especially of rough and mountainous regions.

The success with whieh the Department of the Interior, Canada, has carried on the photo-topographical surveys in the Rocky Mountains, induced the Canadian Commission of the Alaska Boundary Survey to adopt that method for the preliminary surveys now being made in that land of the midnight sun. The essential

A GLACIER.

difference between the photo-topographic camera and others is, that it has no adjustment for focusing, because the views are all distant. The camera is a rigid, brass-bound box, with a superior lens, and its field covers about sixty degrees, so that six views take in the whole horizon. It fits onto the tripod of the theodolite, which is used for measuring angles, and hence, it can be levelled before exposing for a view. Glass plates, $4\frac{3}{4} \times 6\frac{1}{2}$ inches, are used for obtaining the views, which are afterwards enlarged to double the size, and from the prints the necessary measurements are taken for obtaining the contour lines, that is, for the topography of the country.

The accompanying view (of some 700) is one of last season's work. It is taken from a mountain 4,000 feet high, and shows an ice river (the Windom Glacier), with two branches emptying at the head of Taku Inlet, Alaska.

The surveyor's work in photo-topography is very arduous and often very dangerous. He is continually climbing to the summits of mountains, where no foot has trodden before. His camp is pitched on the sea shore and as a rule he finds very little room for his tent, for the shore rises very abruptly and the mountains are densely wooded to the water. It sometimes happens that in pitching camp not enough consideration is given to the tides; the result is a rude awakening at night by the advancing waters, and a hurried scramble for luggage and outfit, and a rush to a safe retreat in the bush and woods. Naturally, the woods at the lower level are the more dense, but the most annoying, aggravating, and expletive-provoking hindrance to travel, is the devil's club, a tall, partly trailing shrub, which is covered with thorns (poisonous at that) from head to foot; and even its large leaves are all fortified in this manner. After the timber line is passed, which is generally at an elevation of about 2,500 feet, travelling is somewhat better, especially in the latter part of the season, when there is not so much snow. However, many crags and precipices are encountered, where nerve and judgment are necessary to make a successful ascent.

Glaciers, too, have to be crossed, many with deep and treacherous crevasses. Each climber is provided with the indispensable alpenstock. Hot with perspiration, the men reach the summit, to find themselves in an Arctic region, and soon their frames are chilled to the core. The panorama presented here it is impossible to describe. A writer lately put it into these words :—

> "What a scene of desolation
> I saw from the mountain peak—
> Crags, snowfields, glaciation,
> Unutterable to speak."

As the surveyor stands on the uttermost pinnacle of drifted snow on the summit, he is at times obliged to lash a stout rope around his body, the other end of the rope being fastened to his assistant down the slope, while beneath that snow on which the surveyor stands, is a yawning chasm of a thousand feet or more in depth. Those are anxious hours for him, as he stands there in a howling, icy wind, reading his angles to prominent peaks, and taking the necessary photographs.

The return to camp is quickly made. At times he will toboggan over the snow fields, squatting down, and using the alpenstock under the arm as a check and steering gear. This is very dangerous, for his mad rush may unexpectedly bring him to an unseen precipice. Two such eventualities occurred during last season, but fortunately the actors found themselves imbedded in deep snow below. It might have been otherwise.

Of wild animals he sees but few : the noise made drives any there may be away. However, mountain goats are met with, and as many as sixty have been seen in a band. They are very stupid. Black bears are plentiful, as shewn by their tracks and otherwise, but Bruin does not cultivate the acquaintance of man. Only an inexperienced climber would think of burdening himself with a rifle when climbing a mountain thousands of feet high. Even were there nothing else to carry, which there is, one's own weight is quite sufficient to transport.

Alaska is a grand country for showing the merits of the camera over all other methods, for topographic work in a mountainous region, but those who have been there ever prayed for a little less rain and clouds.

—OTTO J. KLOTZ.

SUSSEX VALE IN WINTER.

Enwrapped in quietude the valley lies,
While o'er the sombre bluff the winter moon
Bursts from a fleecy cloud whose shadow flies
Across a floor of ivory, diamond-strewn.

How strangely still and beautiful thou art
Beloved valley ! claspt in the embrace
Of all-prevailing calm : thy pulseless heart
As lifeless as a world in sunless space.

Though, unresponsive to the sad refrain,
Thy soul is rapt to realms of silent sleep,
Yet are there seasons when the poet's strain
Chords with a lyre no mortal fingers sweep—

When over all the fair autumnal vale,
The golden glories of the evening stream ;
Or when the morning star is shining pale,
Beneath the vernal sun's reviving beam ;

And in the night, ah, in the glorious night !
All-fragrant with the odoriferous bloom
Of gardens old, and orchards robed in white,
Whose murmurous voices haunt the spectral gloom.

Melodious waters flow through balmy fields:
They wander on through moonlit woodland ways,
To the great deep, where that low murmur yields
Its tribute to the eternal hymn of praise.

Beyond those purple hills are other lands,
Where other souls unsatisfied may roam;
Still vainly seeking, on far alien strands,
A country more beneficent than home.

Here, in this free Canadian vale for me
Nature in forms of tragic beauty dwells;
That wakes in rapturous intensity
The thrill divine that all delight excels.

SUSSEX, N.B. —A. B. HUBLY.

SCIENTIFIC NOTES.

Our readers will remember that The Astronomical and Physical Society of Toronto, conjointly with The Canadian Institute, has been for a year or two engaged in the endeavor to bring about a unification of the Astronomical, Civil and Nautical days. At present, the Astronomical and Nautical days begin at noon and are counted over twenty-four hours, while the Civil day commences at midnight and runs in two series of twelve hours each. As a result, these days over-lap each other in such a manner that the earlier halves of the Astronomical and Nautical days respectively belong to the latter half of the Civil day of one date, while the latter halves of these days belong to the first half of the Civil day of another date, consequently when comparisons are to be made, there is no end of confusion in dates which should be free from this difficulty and can be freed from it by the adoption of mean-midnight as the instant for all of these days to begin. After consulting with the astronomers of the world, the societies have decided to petition the Governor-General to lay the subject before the Home Authorities in order that if possible the Nautical Almanac for the year 1901, shortly to be printed according to usage three or four years in advance, may be issued with the Astronomical and Nautical days in unison with the Civil day.

On the 28th of February last, a series of increasingly violent earth-currents culminated in damaging one of the recording condensers used in the cable office at St. Pierre, Miquelon, and in seriously interfering with the working of the cable generally. The earth-currents appear to have been closely associated with the brilliant auroræ and magnetic storms which were very prevalent toward the end of February. As a result, Professor Otto Klotz, of Ottawa; Professor Cleveland Abbe, of Washington; Mr. Charles Carpmael, F. R. A. S., and others have pressed upon the attention of the Astronomical and Physical Society of Toronto the desirability of carefully investigating these phenomena, a work in which it is expected the cable and telegraph companies will assist. The Society has appointed a committee, with Mr. R. F. Stupart, Acting-Director of the Toronto Observatory, as chairman, to consider the matter.

During June, Mercury will be an evening star, rising on the 1st at 5 a. m., and setting at 8.55 p. m., and rising on the 21st at 6.13 a. m., and setting at 9.29 p. m. Hence, this planet will during the latter half of the month be well situated for observation in the early evenings. On the 22nd, he will have reached his greatest elongation east, being 25¼ degrees distant from the sun. During the first half of June he will present a gibbous disc, and during the latter half, a crescent form. After the 15th, this brilliant red sparkler may be looked for after sunset in the west. If not easily recognized, an opera glass will be useful to distinguish him in the twilight. Later on, he may be readily picked up by anyone familiar with his appearance. A small telescope should show him with a disc. Those who have never seen Mercury, and can do so, should certainly not lose this opportunity. On the night of the 15th, his position will be close to the 3rd magnitude star Delta Geminorum.

Venus will be a morning star during June, rising at 2.29 a. m. on the 1st, and setting at 3.45 p. m. On the 21st, she will rise at 2.07 a. m., and set at 4.25 p. m., or in daylight.

Mars is still a morning star but will change to evening star by the end of June. On the first he will rise at 1 a. m. and set at noon. On the 21st, he will rise about midnight and still set about noon. During the earlier half of the month, his position will be near ϕ and ψ Aquarii. In appearance, he will be gibbous, and indeed more so than at any other time in 1894. He will be in quadrature with the sun on the 17th, and during June will move from Aquarius across

a corner of Pisces into Cetus. He is now rapidly coming into position for even better observation from northern stations than in 1892, the year of his last nearest approach to the earth, and during which he created a wide-spread interest in astronomy, and did more to induce the general public to take up the study than has any similar event for many years. Those who may not be familiar with his appearance, should try to pick him up on the night of the 25th of June, when shortly after 12 o'clock he may be seen shining with ruddy lustre about three degrees south of the waning moon, then in her third quarter. As the moon is one-half of a degree in diameter, Mars' distance from her will be six times the breadth of the moon when full.

Students of Saturn should not lose the glorious opportunities presented during June for observing that planet, which, owing to increasing distance from the earth, is already beginning to be diminished in size. This planet is well situated for study from immediately after twilight begins until about 1 a. m. His position is still some six degrees north of Spica, the brightest star in the high south-eastern part of the early night sky. These objects cannot be mistaken. The upper one is Saturn, as any telescope will show; the better the instrument, of course the better will details be brought out. The rings are still opening, and Cassini's Division is easily discernible in a good glass. By the end of the month, the earth will be nearly 11½ degrees above, or north, of the ring-system, while the sun will be nearly 14 degrees north of it. As the result, the ball of the planet will stand well out in the centre of the rings and, with them, will form a most beautiful object. Owing to the earth's motion, Saturn is being pushed into the sun's rays, in which he will be obscured in September. Consequently, no time is to be lost by those who propose to make a study of his features while they can be observed against a clear night sky.

Jupiter and Neptune are invisible, being practically behind the sun so far as an observer from the earth is concerned.

Uranus is well situated and should be perceptible to the naked eye upon a very fine dark night. He is easily picked up in an opera-glass, but a telescope is required to bring out the pale sea-green disc which serves to distinguish him from adjacent stars. His position, which changes slowly, is about one degree and a-half to the west, and about half-a-degree to the north of Alpha Librae, a star easily recognized in the south-east in the early evening. On the 15th, his place on the sky is Right Ascension 14 degrees and thirty-eight minutes, and South Declination 15 degrees.

On the night of the 15th, about 7.38 o'clock the moon will occult 3 Scorpii, a 7th magnitude star. Though the moon will be only eleven days old, she may be sufficiently brilliant to make the observation a somewhat difficult one except in a fairly good telescope. The occultation will occur at the dark side of the moon; the star will reappear about 8.45.

The sun is an object of interest, owing to the spots and faculæ to be seen almost daily on his surface. Some very notable spots have recently been observed.

BOOK NOTICES.

William Briggs, publisher of *The Primary Latin Book*, by Messrs. J. C. Robertson, B.A., Principal of the Toronto Junction Collegiate Institute, and Adam Carruthers, B.A., Lecturer in Greek, Toronto University, has just been advised that the book has been authorized by the Department of Education of the Province of New Brunswick. The book adopts advanced methods of teaching, and is finding great favor particularly among the younger and more progressive school of educationists. It had already been authorized in Ontario, recommended by the Superintendent of Education of British Columbia, and recommended also for authorization by the Advisory Board of Education of the North-West Territories. The recognition of the work of our Ontarion educationists by the other provinces evinces a growing confidence in the ability of our native Canadians to supply suitable text books.

Journal of the Canadian Bankers' Association. Toronto: Edited by J. H. Plummer, J. Henderson and E. Hay.

This excellent magazine, which is now issued by a committee of Toronto Bankers, aided by correspondents elsewhere, possesses much in its contents that is interesting to the general reader and valuable especially to bankers. Amongst recent articles of this nature are "Free Banking in Canada," by Roeliff Morton Breckenridge of Columbia College, and an exceedingly interesting paper on "The Card Money of Canada." detailing the history of such money under the French and the British régimes in Canada, Every banker who wishes to keep pace with the current thought of Canadian banking circles should be a reader of this excellent monthly.

Hiram Golf's Religion. They Met in Heaven. By George H. Hepworth. New York: E. P. Dutton & Co. Toronto: The Copp, Clark Co., Ltd.

These two books are admirable in paper, typography and general appearance, and it is possible that their contents may make them popular in limited circles. They are not so much stories as sketches, in which the author uses a few characters and incidents of life in a little village as a convenient means by which to present ideas concerning the essence of religious life. In *Hiram Golf's Religion* there are here and there excellent ideas, but the phraseology and in fact the spirit of "the shoemaker by the Grace of God" are, to say the least, unpleasing and at times flippant. It cannot be said that the author has chosen a happy method of presenting views of spiritual life. *They Met in*

Heaven is more happily written, and on the whole makes interesting reading. The author's style is quiet, easy, graceful, and Hiram Golf, while having a part in the discussions of the circle that gathers at Parson Jessig's house, is not so offensively monopolizing. Van Brunt, Parson Jessig and "the Master" are all interesting characters, and the evolution of spiritual life in the first named is told in an interesting manner, and not without some profit to the reader.

Katherine Lauderdale.—BY F. MARION CRAWFORD, 2 vols., New York: Macmillan & Co. Toronto: The Toronto News Co.

A two volume novel, covering the events of only four days, is almost unprecedented in the annals of fiction, but notwithstanding that the story contains little of the sensational and nothing of the tragic, but is simply a story of love and misunderstanding in a wealthy circle of New York society. Mr. Crawford has produced a novel which in the interest with which it holds the reader, in the clearness of the portraitures drawn, in naturalness, and in fact in almost all the characteristics of a good story, must rank as one of the most entertaining of recent years. The hero of the story is a young man who has not yet found his line of life, and is unable to marry with any prospect of maintaining a wife on the scale which his social position is supposed to call for. He is, moreover, given somewhat to excess in drinking, a fault which he confesses to his intended and which he proceeds to correct. The heroine is on the whole a pleasing young lady, of great potentialities morally, but rather purposeless and vague in her spiritual aspirations. A secret marriage, not discreditable to the hero or heroine, is the centre of the plot; its suddenness, its purpose, the hesitation on the part of the bridegroom and the associations connected with it are exceedingly interesting; the immediate sequel with its misunderstandings, quickly, however, removed, greatly interest the reader. The other characters, though clearly drawn, with Mr. Crawford's well-known ability in depicting character, are not the stuff generally that martyrs are made of, yet of them as of the two principal characters we would like to know more, and the author has promised to gratify our wishes. The peculiar ability which Mr. Crawford displays in all his writing of generalizing truth with force and neatness is very marked in this story, and adds much to its charm.—M.

A Manual of the Procedure at Meetings of Municipal Councils, Shareholders and Directors of Companies, Synods, Conventions, Societies and Public Bodies generally, with an Introductory Review of the rules and usages of Parliament that govern public assemblies in Canada. BY J. G. BOURINOT, C.M.G., LL.D., D.C.L., D.L., Clerk of the House of Commons; author of "Parliamentary Procedure in Canada," "Manual of Canadian Constitutional History;" "Federal Government in Canada;" "Canadian Studies in Comparative Politics, etc. Toronto: The Carswell Co. (Ltd.), Law publishers, etc., 1894.

A new book from the pen of Dr. J. G. Bourinot is certain to attract some attention. He is certainly the best known Canadian author on constitutional questions, and a number of his works have been regarded as standards for many years. One of the good qualities about Dr. Bourinot's writings is that they are all upon subjects that require explanation or careful scientific handling. His writings are intended to meet the needs of the day, and not merely to gratify what might be called an author's ambition to write about something, or, in other words, to make a new book. It must be said of the present work that it meets a very important demand.

The subjects discussed in the present volume are classed under five divisions: Rules and Usages of Parliament; Rules of Order and Procedure for Public Meetings and Societies; Corporate Companies; Church Synods and Conferences, and Municipal Councils. The subdivisions under each of these headings are very full and complete. It will thus be seen at a glance that the scope of the work is large and covers matters with which every business, professional and public man is constantly concerned, and upon which he requires directions and information in some reliable form, available for ready reference. This is exactly what the present work supplies.

The presentation of scientific, theological, philosophical, and historical subjects, in a popular form on the platform, in the leading reviews, and in the novel, has engaged the attention of many of our best scholars, writers and debaters. Dr. Bourinot has turned his attention to the difficult but very important task of popularizing the study of legal and constitutional questions. In other words, he has brought these studies within the range of practical, busy life. He is doing for these subjects what the author of a good work on hygiene does for anatomy and physiology, that is, he is bringing otherwise technical questions within the reach of the general reader.

The amount of information contained in this volume of 444 pages is very great, and is as varied as it is extensive. The rules that ought to govern all deliberative bodies are clearly set forth. The author is very careful to point out the distinction that exists between such rules of procedure as are drawn from our own legislative assemblies and such as are drawn from those of the United States; for example, such motions as "to lay on the table," "to postpone definitely" or "indefinitely," and "to reconsider" are obtained from the latter source.

The value of the work, as a reference handbook, is greatly enhanced by a very complete index, which occupies 40 pages. By turning to this index a full analysis of the entire volume is found.

The author is to be congratulated upon the excellent matter which is to be found in this new book, and also upon the literary style and taste with which it is presented to the reader. The publishers have done their share well. The paper, type and binding are all that could be desired, even by the most fastidious. Has this work come to stay with us? may safely be answered in the affirmative.—J. F.