

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
!! se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Continuous pagination/
Pagination continue
- Includes index(es)/
Comprend un (des) index

Title on header taken from: /
Le titre de l'en-tête provient:

- Title page of issue/
Page de titre de la livraison
- Caption of issue/
Titre de départ de la livraison
- Masthead/
Générique (périodiques) de la livraison

Additional comments: /
Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below /
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

VOL. I.

NO. I.

KING'S COLLEGE

University Magazine.

APRIL, 1871.

CONTENTS.

- THE EDITOR TO THE READER.
GEORGE RAYMOND.—*Chapters I-III.*
REMINISCENCES OF COLLEGE LIFE. No. 1.—*By A Graduate.*
SONNET: LA MORT.
POLARIA. No. 1. ON FIRST AND SECOND LOVE.—*By Le Juif Errant.*
DEEP SEA EXPLORATION.—*By John Hunter, M. A., F.C.S., F.R.S.E.*
THE BEAR AND HIS ROOK.
PHILARETE CHASLES.—*By F. C. Sumichrast.*
-
-

The right of reproduction and translation of all the articles is reserved.

HALIFAX, N. S.
PRINTED BY JAMES BOWES & SONS, BEDFORD ROW.
1871.

LE
K61
UN3
copy 1

KING'S COLLEGE

UNIVERSITY MAGAZINE.

READER,—

WE commend to you this booklet : its most pressing claim on your consideration its coming from the University where Nova Scotia's ablest men have been trained. Farther, the sincere wish of the Editor and his Staff to make it worthy of your perusal, to afford you not amusement merely, but also instruction.

To succeed in this have we assembled a goodly band of writers from divers lands, and they will all strive to surpass one another to win your favour. Some portion of their work will you find in the following pages, and, as month succeeds month, every number will bring you, we trust, continued proof of their energy and talent.

It may seem that this undertaking of ours is somewhat ambitious, but, Reader, we feel sure of success if we gain you to our cause. In this belief do we now send you this **FIRST NUMBER**, and we shall receive your judgment with the earnest desire to improve the Magazine so as to render it really worthy of becoming a feature in Canadian literature.

And yet, ere we finally launch it forth on the stormy Ocean, must we call with entreating voice, on all who love this Dominion, to support us in this our Enterprise.

Now, go

*Nuper sollicitum quæ mihi tædium,
Nunc desiderium curaque non levis,
Interfusa nitentes
Vites æquora Cycladas.*

GEORGE RAYMOND.**CHAPTER I.**

“Do you know those snug little rooms in the Temple? Well, it was in one of those we sat, on a January evening, drinking whisky toddy and smoking, some pipes, some cigars.”

“Who’s ‘we’?”

“Clarence Edgeware, Ned Gray, Gus Travers, a clerical, by name Browne, and your servant, George Raymond.”

“On what occasion?”

“Twelfth-Night, I think. But the gathering was fortuitous. We had severally dropped in upon Edgeware, who at the time was supposed to be reading very hard, and was in reality studying love-letter writing.”

“Studying?”

“Yes; do you suppose there is not something to study in the composition of a love-letter? Why, my dear fellow, you may allow yourself a slip in the wording of a business communication, but in matters of such weight as amatory epistles, beware of mistakes, even the slightest. The writing of a love-letter, of a bona-fide love-letter, I take to be one of the most difficult tasks ever allotted to man, and one which, when safely got over, he ought to look back upon ‘with the thankful heart of parting praise!’”

“George, you amaze me. I had always imagined that you were the most impassioned of men, and that in you the worship of the sex had reached, what shall I say? adoration, fanaticism.”

“Nearly did; long ago. But I got wiser, and at present I do not trespass beyond admiration. And even that is not easily excited.”

“Yet who more fervent than you in your love—true it is that it was as short as fervent—of the ‘most beautiful creature in the world.’ Happy world! Happier England! What a number of beautiful creatures there were in it during these four years.”

“Spare me. My wounds, scarce healed—you don’t believe it? Well, perhaps you are right;—pass the sherry then.—Absurdity

apart though, I certainly am far from being the same enthusiastic slave to woman that I was at the period to which you refer. If I have changed, I think it is for the better.—”

“Impossible.”

“You flatter me. But praise is sweet, very sweet, and in spite of Descartes, I will allow myself to enjoy this. So I have changed—I think we may safely grant that—and have accomplished the ‘gilding refined gold.’ Results: diminished devotion to what some fellows call ‘angels,’ and some fellows call—the opposite, the converse, you know—greater regard for my own comfort, fewer colds—being out less frequently in the evenings below darkened windows—and a general rationality of conduct, much appreciated by my mother.”

“Mother! you have a mother?”

“Incredible though it may seem, I had. Eighteenth century style, aged, but sound. Useful at Christmas, when bills were more numerous than pleasant. In the way occasionally, when I want to do something very bad, and can’t on account of her image—impressive and striking—stepping in betwixt self and evil deed, and imploring. Forgiven, however; amiability of temper in self greatly surpassing tendency to dogs.”

“Pardon me; but did I hear right? You said ‘had’ or ‘have’?”

“Had. She departed this world in the year of her age the seventy-third, consequently three years ago. Since then my family has consisted of a collection of portraits with remembrances attached.”

“I am inquisitive, and therefore rude.”

“Therefore restrain yourself. You already know more about the ancient history of my family than any other man in London.”

“I know nothing.”

“Precisely the right amount. But we are wandering from our discussion on study, as required in love-letter writing. To return. Little as you may pretend to know about such matters,—and little as I believe you,—you are not without having had experience of.

the unpleasant results of letters being opened by others than the owners?"

"Personally I am; indirectly I have heard of such matters. Indeed I know a capital story, and, if you will forgive my interrupting you, I will relate it."

"Go on; meanwhile I will discuss one of your oranges. Is that sherry never to get past you?—That's right. Now for your episode."

"It is very short, and was told me by Leslie last autumn. He swore it was true, and therefore I give you my authority.

A friend of his, a very gay and agreeable fellow, of immense coolness and full of resource, did enchain himself—whereby I mean he married.—His wife was a very nice creature, pretty, sweet, accomplished, affectionate, in fact what either of us would wish—"

"Speak for yourself, I beg."

"What *I* would wish, then, and do wish. They lived most happily together for a matter of some two years, at the end of which Leander goes down to Cymon's shooting-box, and Hero starts on a visit to Penelope, her school-fellow and still her confidante. As of yore, the Goddess of Discord seized the moment of bliss—"

"That is the time when they were separate?"

"Dear no. I mean the general moment—the bliss that had lasted so long—"

"Too long. A couple of years is scarcely credible."

"Cynic. Let me go on. Seized the occasion, if you will have it, of their being momentarily severed to throw in Leander's way—"

"Halt! You ought to have called him Theseus. I smell a tale of Ariadne and desertion."

"Not quite."

"Very nearly. See if I do not finish it better than you. Leander meets a lovely Helen, who becomes enamored of him, or pretends to become so—yields to her entreaties—forgets Hero—drowns her memory in floods of nectar—in the language of the country 'toddy;' in that of the Poets 'bright glances of woman's eyes.'—Is startled in the midst of his guilty joy by a messenger of Hero's—"

she warns him of her return to their halls, marble without and gold within—she calls him to her—Leander tears himself away from the lovely Helen—bids her an eternal adieu, and be sure to pre-pay her letters—the disconsolate damsel indites lines indicative of immortal passion to the beautiful Leander, and sends the precious epistle—pre-paid as the noble youth had recommended her.—But the Fates and Juno, angered, have appeared to Hero in a vision—the tender spouse awaits not the arrival of her lord, who, delayed on his way by much feasting and eating of meat and drinking of sweet wine, comes three days late—and boldly breaking the seal, wax-formed, of the epistle, reads the eternal-love protestations of the lamenting Helen.—Re-appearance of Leander, agonized reproaches—exchange of winged words—‘tarnal shine’ in Yankee tongue, and consequent train of misery and sorrow.”

“George, how do you know it? That is just the story Leslie told me. Only he said nothing about the train of misery and sorrow.”

“Knew better. Might suppose it, but Leander and Hero kept that portion dark. Hero subsequently made Leander very wretched, in spite of the noble youth’s real repentance. Drove him to very bad courses, and almost gave him an out-fit for the sorrowful regions of Hades.”

“Werr you acquainted with them.”

“Intimate with both. Hero was my wife.”

“Eh!”

“Yes. And if you are quite done, let us have a cab and go to see ‘School;’ I want to know what Love is.”

CHAPTER II.

The theatre was very crowded that night. The comedy “drew” well, and the two friends congratulated each other on their mutual foresight in securing seats. They went in quietly—the famous examination scene was on—and sat down as they listed: Welman in

front, fond of showing his handsome face, and turning it almost full on the audience; Raymond farther back, and half hidden by the silk curtains.

The drop-scene fell, and the buzz of conversation rising from the stalls, invaded the place wherein sat the two.

“Who is the lovely girl in the box yonder, George?”

“The one with the abundance of false hair? That is Blanche Stockleigh, the belle of the season, and the most accomplished flirt within the four seas.”

“Worse than Fanny Ellesmere?”

“Far. Fanny had one redeeming point which gave a fellow a chance of escape.”

“What was that?”

“Her appetite. But Miss Stockleigh is unattackable by ridicule, and so far safe.”

“Is not that Burleigh who is sitting beside her?”

“Yes, and as woful an example of a modern Hercules at the feet of an Omphale of the period as you can desire. Firmly bound by her chains he has not once made an effort to free himself. I wonder occasionally whether she means to leave anything of spirit in him. As for marrying him”

“Well?”

“She would as soon think of entering a convent. Burleigh is a reckless, mad lover, but were he a husband—*nous verrions changer tout cela.*”

“Excuse my boring you with questions, but as I have been out of London so long, I really feel quite a stranger, and cannot help wishing to know all the new faces.”

“Make yourself easy on that score. I warrant that before the week is out you will be more extensively known than you may care to be. I pity you.”

“Pity! Why?”

“Have you not shared in that Abyssinian campaign? Every fair here will be boring you for a detailed account of your perils and triumphs. If you are not hooked to write a book, or at the very least a tract, I am a Dutchman.”

“A regular Count Rolf, eh? I dare say I shall stand the pumping well enough. But who is that man who has just joined the Stockleigh party?”

“That? A viper, my dear fellow; a true pest to society. That is Vere Brandon, and a bigger scoundrel I never met.”

“Do you know him?”

“For my sins, I do. What is called ‘knowing’ one here. A mere acquaintanceship, which I take great care not to cultivate. The man is repugnant to me.”

“Yet he seems well enough.”

“Trust to him for appearances. He is all show; outwardly a gentleman—shame that any one should call him so—but inwardly a resolute, unscrupulous, unprincipled villain.”

“I say, George, you are putting it very strong.”

“Too strongly. I have done him injustice in saying he is also unprincipled—that is a slip. Vere Brandon is, on the contrary, ‘a man of principle.’ He looks out for himself and bites every body else.”

“No improvement in the description. And is he received in society with such a character?”

“His real character being so carefully hidden by the veils of good-breeding and astuteness, Brandon is well received everywhere. He is rich, or rather said to be; clever, well-informed, a first-rate companion at a dinner-table, and a devoted slave to power, in whatever form it may appear.”

“I am sure to meet him, eh?”

“Of course. This evening, probably.”

“At Harcourt’s?”

“Yes. Harcourt’s suppers are famous for their gaiety and brilliancy, and Brandon is very intimate there.”

“Will you come?”

“I had promised to put in an appearance, but now that you are of the party, I shall certainly go earlier and stay later.”

“Thank you very much.”

The play over, the two friends walked quietly down to Ralph

Harcourt's rooms, where they found a party of seven already assembled.

Raymond, who knew every one there, after shaking hands with some and bowing to others, retired into a corner,—an odd habit of his—and resumed his watch. He seemed ever to be studying men's thoughts and motives, and trying to make them agree with their actions.

In a few moments he was joined by Vere Brandon.

“Have you heard from Lowood lately, Mr. Raymond?”

“From Lowood? Yes, some three days ago. Is there anything to interest you in that neighbourhood?”

“Much. Besides being the residence of your charming ward, it is also that of a very dear friend of mine, Allan Merton, the incumbent, whom you doubtless know.”

“Slightly. And what piece of scandal or misfortune have you ferretted out from Lowood?”

“Mr. Raymond, your expressions are not particularly suitable. Indeed I might be justified in taking offence. . . .”

“Then don't come for it. We know each other well enough, Mr. Brandon, to do away with your usual blandishments. You are aware that I have not the slightest respect for you, and I am aware that your sole motive in addressing me is to impart, more or less skilfully, disagreeable news. Out with it, and do not waste your time on one who is not worth it.”

“Really, you amuse me. Pardon, as far as I may apply the word to you. My meaning is that I cannot penetrate the reason of your decided hostility to me. Surely none of my actions or words have ever given you ground ——”

“I am forced to interrupt you again, Sir; but you are beating about the bush. We will say, if you prefer it, that my sarcastic temper makes me look for evil only in men. It will not matter, for all the same, I shall have found plenty in you. And now will you be good enough to tell me what has happened to my ward, Eveiyn D'Aston?”

“Your penetration is remarkable, Mr. Raymond ——”

“Say rather my knowledge of you pretty thorough.”

“So be it. But what I have to tell you from Lowood—since you will have me say something—concerns Miss D’Aston only indirectly.”

“Are you sure of it?”

“Sir?”

“Oh, never frown. You know that with me your airs are of no use whatsoever. Put up with what you get at my hands being unable to return it.”

“In a word, then, scarlet fever has broken out in the village, and half the infant population is down with it.”

“Had your intention in informing me of this been different, Mr. Brandon, you would certainly have received my thanks expressed more warmly. Such as they are, however, I tender them.”

“And in the way in which you *would* tender them but for your unfounded prejudices, do I accept them.

“Supper is ready, Sir,” announced the servant.

To Brandon’s surprise and secret mortification, Raymond gave no sign of discomposure or anxiety; stayed everyone out, and did not leave himself till Vere had been forced to depart. Raymond had been Harcourt’s college-chum, and not unfrequently remained all night with him.

This evening—all the guests being gone—the two had a long conversation, lasting till near dawn. Raymond then left his friend and repaired directly to his own rooms, ordered his servant to prepare for a speedy journey to Lowood, and in two hours thereafter was smoking his cigar in the railway carriage.

CHAPTER III.

Raymond was a man of large independent fortune; of great natural capabilities, much improved by long and careful training; of high principles, but occasionally carried away by the violence of his passions. He was very far from being the cool, heartless being many of his acquaintances took him for; below the polished bear-

ing of the man boiled a volcano of fierce emotions and wild desires. His temper, carefully curbed, was, when unrestrained, perfectly terrible; his dark grey eyes, usually full of sarcastic gleam or dulled by look of indifference, could flash right furiously when anger mastered him. But then this was very seldom, for George Raymond entertained a profound contempt for most of those things which upset a man's equanimity. He had so often, in his younger days, experienced the hollowness of the world's friendships and bonds, he had so accustomed himself to see the little, mean motives which govern most men's actions, that when some new piece of treachery, some farther deceit on the part of any one reached him, he did not feel even surprised. At most he would vouchsafe a shrug of the shoulders—a habit he had well learnt in Paris—and if much pressed for an opinion, would give utterance to some bitter remark or biting reflection, which silenced objection. Withal, he was at heart a good, true man; full of devotedness for those he loved, though he strove to hide his benefits under an appearance of gruffness which blinded many; with noble aspirations towards higher and better things, and a fund of common-sense which generally brought him safely out of the not unfrequent scrapes into which he got. This faculty of drawing misfortune on himself was the infallible offspring of his contempt for his fellows; he cared too little about the “*Qu'en dira-t-on?*” and if minded to do something odd or eccentric would not be deterred by any thought of its endangering his position or character.

“The world may think me mad, if it pleases,” he said, “but as the world's opinion is perfectly indifferent to me, I shall just do this.”

And he did it, and eventually repented of it.

It was thus he married. He had fallen in love—or fancied he had—with a lovely girl of eighteen, penniless and friendless. Had asked his parent's consent to the match, met with a refusal and a long sermon, had, in his own way, made what would be called by our French neighbours the “respectful summonses,” but finding his parents obdurate, and being threatened with disinheritance, had taken up his abode in London, and married Jane Varney.

His life, during the first year, was pleasant enough. Though he had to slave very hard to make both ends meet, he nevertheless found sufficient comfort at home to make him bear his troubles easily. His was one of those natures that demand obstacles to surmount and difficulties to vanquish. Once roused to the fight, no one more indomitably persevered till he had conquered, and thus after the first twelvemonth had passed, he saw an easier future opening up for him.

His greatest desire was to gain for his beloved Jane the station which, but for his father's stern refusal to acknowledge her, would have accrued to her at their marriage. For this end he toiled night and day, nowise sparing himself, and throwing his whole energies into the work. He must have succeeded ere long, if not in attaining wealth, in securing at least comfortable independence, when suddenly a blow fell upon him which completely paralysed and crushed him for a time.

His mother, whom he loved with the intense love of a great nature, died in the second year of his marriage, and George found himself deprived of his advocate with his father. But this was not the worst. Jane Varney, who, though penniless and an orphan, had all along possessed a most ambitious and scheming mind, finding that old Mr. Raymond remained immovable in his determination to disown his son, came out in her true colours, reproached her husband with having deceived her in regard to his affairs, and—oh triumph of falsehood!—having made her state more wretched than before. It must be remembered in order fully to appreciate this last sting—that George Raymond had taken her from a small school, in which she was the most miserable of pupil-teachers.

At this juncture, an old friend of Raymond's met him by chance in Piccadilly, linked his arm within George's, and after an evening most pleasantly spent together, won from him a promise to come down to Scotland.

Jane Varney had gained at school considerable influence on a rich, but weak-minded young lady, by name Ellen Mowbray, who, at about the same time as her governess, had married a very wealthy Manchester manufacturer. The correspondence between the two

brides had never flagged, and invitations to Jane and her husband to visit the Henrys in Manchester had come regularly every Christmas and every Easter, and had been as regularly refused by Raymond, who had a great dislike to "parvenus." Now, however, Jane declared that she would no longer hear of her dear Ellen's kind requests being declined, and if Mr. Raymond did not choose to accompany her, he might either stay in his house or share the companionship of some of his "dissolute" acquaintances.

"I will," was Raymond's only answer.

A couple of days after, husband and wife were severed, and mutually rejoiced thereat. It was then that took place the awkward episode which the hero had himself told to his friend Welman, and which widened the breach between the two.

Give any woman an arm against you and she will pitilessly use it when she fancies it can help her purpose. Jane Varney's was admirably served by her husband's escapade; she made every possible use of it, drove him wretched by her incessant jealousy, by her continual reproaches. She complained of neglect, of coldness, of being ill-used.

"It is because I have no one to see after my interests," said she, "that you tyrannise me."

Which tyranny meant the most abject subjection. Raymond had so keenly felt the dishonour of his very slight affair with "the lamenting Helen," that he thought it his duty to prove his repentance by complete obedience. Yet the sense of honour and duty in man cannot, though exerted to the utmost, prevent his sinking below the continuous blows of injustice and wanton cruelty. So George began to think that he had paid sufficiently dear for his incursion into forbidden realms, and told his wife so one day.

"Enough, Sir," replied she, with a look of fiendish hate which startled him. "Enough; I know now what life awaits me."

Her words had precisely the contrary effect to that she had expected and wished for. By the utter indifference with which they were received, she judged rightly that all her influence on Raymond was gone. He evidently had made up his mind for a scene such as she was commencing. Jane was too clever to waste time in mere

contest of words; besides, she had a surer way of punishing the man.

It was some three weeks after this that, as Raymond sat by his study-fire, poring over his book, a loud knocking at the street-door alarmed him. It was rapidly opened, and a strange voice enquired for the master of the house.

“This way, sir,” said Raymond.

The new-comer was a young man apparently about twenty years of age, well-dressed and smelling strongly of tobacco.

“Sir,” said he, without farther preface, “an accident has taken place on the London and Dover. Several persons are hurt, and amongst the wounded is a lady whose cards bear the address of this house. I have been sent to fetch you. We can go by the special train that leaves in a few minutes.”

Raymond was staggered. His wife on her way to Dover! He could not understand it. She had left him at six o'clock, saying she was going to see a friend, and might be late. On his proposing to go and fetch her, she had refused. “Some one would take care of her,” she said in her biting way.

The messenger of evil did not guess at the real cause of George's astonishment. He put it all down to the horror of his news.

Fast sped the “special,” bearing officials and doctors to the scene of disaster. Faster sped the husband's thoughts, as he revolved in his mind every possible solution of the mystery. Lights moving about, a confused noise, forms passing rapidly here and there; the train stopped, and the pair made their way as quickly as they could to a house.

Raymond entered—saw three or four bodies covered over—raised the sheet—the features of a man he knew well met his gaze—a dreadful suspicion fell on him—he passed to the next—“Jane!”

REMINISCENCES OF COLLEGE LIFE.

NO. I.

SUNT QUOS CURRICULO PULVEREM OLYMPICUM
COLLEGISSE JUVAT :

WHICH may be freely translated, that during their College course many persons pick up a good deal of rubbish. I do not purpose either to attack or defend this somewhat sweeping assertion. I am prepared to admit its truth to a certain extent in my own case, reserving the right of showing, when occasion serves, that my accumulations, during the interesting period above referred to, were not rubbish only. However, among these accumulations I find certain diaries, containing records of various events, extending over a number of years; and it has been suggested to me that they might be turned to account, in the form of personal reminiscences of College Life. As such I now commit them to the public, in the hope that they may not be altogether without interest, especially to those who have themselves been students at King's College. Of course it has been necessary to abstain from the mention of names; but it is more than likely that some of those who read these pages will recognise incidents with which they were familiar.

Founded in 1781, and chartered as a University May 12th, 1802, "for the education and instruction of youth and students in arts and faculties," King's College can boast of an antiquity far more remote than that of any other Institution, of a similar nature, in the British Colonies. At various periods of its history changes have been introduced tending to make the course of study pursued within its walls more suited to the wants of the day; all denominational restrictions have been long since removed, and every facility has been afforded to those desirous of following special courses. We can point with justifiable pride to many a name on the Matri-cula, the bearer of which has achieved a world-wide reputation, and in every profession are to be found men well-worthy of being ranked with the Alumni of far older and more richly endowed In-

stitutions. Still may we employ the words of a valued Graduate :

Hail to our nursing Mother, old, yet fair,
Her sons rise up and bless her for her care,
And feel, wherever scattered far and wide,
In her success a solace and a pride.

* * * * *

Long live our Alma Mater ! at her gate
May anxious hundreds for admittance wait !
Still may she shine, and stand for countless days,
To crowds unborn a blessing and a praise.

King's College was present to my boyish imagination at an early date. Her "antique towers" (represented at that period by a flat roof, without even a cupola) were invested with a halo, partly the result of my own fancies, but to a considerable extent also suggested by the accounts I had heard of it. Living at a considerable distance from Windsor, I had to depend on these sources for my information, and it need scarcely be said that the reports of enthusiastic Alumni were naturally tinged with colours suggested by their own vivid imaginations. Year after year did some of our senior boys pass from our school, to return after a considerable period in all the glories of coats and stand-up collars and beaver hats; for in those mediæval times boys wore jackets and turn-down collars. Some few would even be found to have advanced to the coveted possession of whiskers, the result, of course, of the studious habits and learned atmosphere in which they had been living. And then the wonderful progress that they had made in all branches of learning, a progress which enabled them to take a prominent part in the public examination of their quondam school-fellows, thereby affording them an opportunity of ventilating that classical taste and elegance only to be acquired at the University.

It is true that the awe which their presence naturally inspired, was sometimes diminished by an apparent haziness on the part of these illustrious Examiners as to the quantity of a word, the construction of a sentence, or the demonstration of a proposition of Euclid; but the effect soon passed away, and if the recollection remained, it served only to remind us that there was still an admixture of common earth in these exalted beings.

But I must not forget to chronicle the marvellous effect produced on our youthful minds when these learned persons condescended to narrate to us some of their own experience. In compassion to our weaker intellects they generally spoke in the vulgar tongue, and while they told us of the Lectures they attended, and of the examinations they underwent, of their intellectual triumphs and superhuman *plug*, they occasionally relaxed their mood, and told us of their recreations also, of their cricket, their expeditions on the lakes, their Quintilian debates. And all this we received with becoming respect, having lately learned from our Homers that even the Immortals sometimes found it necessary to intermit their more serious occupations, and were occasionally not above giving way to "unextinguished laughter."

And so the time wore on, and the "black ship" carried off its yearly instalments, and I was drawing near the head of the school. In another year it would be my turn to present myself for Matriculation. How could I venture to hope that I should pass the ordeal successfully? Anxious to ensure success and to avert such a calamity as a *pluck* at Matriculation I devoted the next twelve-month to preparation under a private tutor, a proceeding from which I derived the greatest benefit.

It was long before the era of Railways in Nova Scotia, and the journey to Windsor had to be made by stage-coach. I have no wish to return to those primitive arrangements, but I have no hesitation in affirming that there was much more real pleasure in travelling then than there is now. What could be more delightful than the drive round Bedford Basin on a fine summer morning behind a team of six good horses in company with a few pleasant fellows? What could be more exhilarating, especially to the youthful mind, than the drive from Schultz's to Dartmouth behind Hyde's six splendid greys? Nor were these journeys entirely without adventure. Occasionally a fire raging in the woods would cause no little alarm as to the possibility of our passage through being hindered. On one occasion we had to traverse a considerable portion of forest which was on fire on both sides of the road. The horses were so terrified, that it was with great difficulty they

were urged onward ; and no wonder : for the roaring of the flames, the dense volumes of smoke, and the crash of falling trees, formed a combination somewhat alarming, even to wiser animals. The heat was so great as to be almost unbearable, and the state of the axles, through friction and the heat of the atmosphere, became such that one of them was welded to the box of the wheel.

Winter travelling in those days was scarcely as pleasant, although agreeable enough when the ground was well covered with snow, and the roads well broken. Such was rarely the case, however, through the whole route ; and it was a common thing to have good wheeling for the first stage out of Halifax, sleighing for the next two stages, and then wheeling into Windsor. These changes from one vehicle to another did not add to the comfort of the travellers. On one occasion we commenced the last stage to Windsor on runners, but before we had gone more than two or three miles we found it impossible to proceed by the main road, which had become bare of snow through the rapid thaw. The driver thought it advisable to turn into a side road, in the hope that there would be more snow there ; but before we had gone much farther one of the runners broke, in going over some rough ground, and we were brought to a stand-still. It became necessary to send to Windsor for a spare coach, and as the driver could not leave the horses, and there was no other equestrian among the passengers, I had to mount one of the leaders, and gallop off for the required assistance. On the whole, perhaps, travelling by railroad is the pleasantest, especially in the winter.

But all this, some will be ready to say, has very little to do with College life. Stop a bit, my friends. I can assure you that to the Matriculant at least the journey was a most important part of his College course. Every turn of the wheel brought him nearer to the object of his hopes and fears. For the first time in his life he possessed the privileges of manhood, enjoyed the notion that he was now his own master, and was prepared to view with approbation every incident that befel him in that capacity. Every thing was invested with a halo of romance that gave an exaggerated importance to the commonest events.

Suffer me, then, in imagination to go once more over the road from Halifax to Windsor: to rattle past the Prince's Lodge, (still standing in my day), to sweep round the picturesque basin: to breakfast at the Half-way House, partaking freely of the celebrated bread so bountifully dispensed by Hannah, well-known to fame: to catch a glimpse of Mount Uniacke and its lovely lake: to dash past Lakelands, and its Church with hovering dove: to descend the Ardoise Hill, enjoying the panorama spread out before us: and finally, past the old Montague House, over the St. Croix River, through the Three-mile Plains, at length to catch a glimpse of King's College, and then, driving into the town of Windsor, to alight from the coach amidst greetings from friends and acquaintances already arrived.

We made our entrance into Windsor on Saturday evening, and our first academical act was attendance at the University Church on Sunday morning. The general appearance and position of that building have been familiar to many generations of students. Standing in the midst of its quiet Church-yard, surrounded by elms and willows and spruce-trees, it forms a conspicuous object in the landscape, as seen from the College, from which it is distant about half a mile. Its architecture is of the early Nova-Scotian order, of which it may be looked upon as a good specimen. At the time that I speak of, the students occupied seats in the northern gallery: their present seats in the nave of the Church being taken up by an immense three-decker, as it was called, consisting of clerk's desk, reading desk and pulpit, rising one above the other, and effectually blocking up a view of the Chancel from a considerable portion of the congregation. This "three-decker" was not peculiar to Windsor, but similar structures were to be found in the majority of the Churches of the Diocese.

I was much struck by the appearance of the Choir on this particular occasion. It occupied the western gallery, and consisted of four gentlemen in black broad-cloth, one of whom supplied the requisite note from a pitch-pipe. I found out afterwards that there were usually some female voices in addition, but for some reason

the owners were absent on this Sunday. The singing was confined to a couple of Psalms.

After Church we strolled up to College, where we remained until the time for afternoon service. I was prepared, as I have shewn, to look upon everything done by a student of King's College with awe and admiration, and I was particularly struck this afternoon by the appearance and sentiments of one of the students, who came into the room where we were sitting after dinner. He was arrayed in a gorgeous dressing-gown and smoking-cap to match, with a large meerschaum in his mouth. Taking his seat with easy dignity, he gave utterance, between the puffs of smoke, to various weighty observations, and at last made some remarks which seemed to call in question the doctrine of Divine Providence. No opportunity occurred for farther discussion, but I returned home with the impression that such were the ordinary subjects of conversation in the rooms of the Undergraduates. I was already familiar with Milton, and picturing to myself the effects of such conversation on the un-instructed mind, like those who

reasoned high
Of providence, foreknowledge, will, and fate;
Fixed fate, freewill, foreknowledge absolute;
And found no end, in wandering mazes lost.

I felt the necessity of suitable reading before attempting to take part in such learned discussions. Under this impression, I carefully read Paley's *Natural Theology*, but I need hardly inform those familiar with College life, that I had not many opportunities for ventilating the knowledge thence obtained, in ordinary after-dinner conversation.

On the following morning I underwent the Examination for Matriculation, at the hands of the Vice-President, the President being absent, and found the ordeal much less severe than I had anticipated. I then bade farewell for a twelvemonth to my Alma Mater, filled with high aspirations and visions of future intellectual pleasures and triumphs.

And here I may be permitted a short digression on the subject of Matriculation. I do not think that parents and guardians are

sufficiently impressed with the great importance of a youth being properly prepared for entrance at the University. So long as he can barely get through, that is all that they are anxious for, being content to leave his future progress to his instructors. The consequence is, that too many enter who are not prepared to profit by the advanced instructions of the Professors, and they are either left entirely in the rear by their better-prepared companions, and thus become discouraged, or the teaching has to be brought down to their level, and the general progress is seriously retarded.

It may be said, that the College authorities have the remedy in their own hands, by simply exacting a suitable amount of proficiency at Matriculation; but at present this will be found to be only partly true in practice. Owing to the condition of the Province, and the peculiar state of education, the rejection of a Candidate generally amounts to sending him away altogether; and not unfrequently the youths or their guardians are excessively indignant if it is even hinted that there has not been sufficient preparation. How can it be expected, that a pupil who knows only the rudiments of Latin and Greek, has a flavouring of Euclid and Algebra, a smattering of French, a very imperfect knowledge of English, and knows nothing of Natural Science, should, in three years, be turned out a proficient in these and several other branches?

Most of the Candidates, also, are too young to profit fully by their advantages. Fifteen is the earliest age at which admission is possible; and instances sometimes occur in which through natural precocity and careful training a boy is qualified to enter at that early age; but as a general rule seventeen or eighteen is quite young enough: the character is more formed, the tastes more developed, and the progress much more likely to be satisfactory. In the case of Divinity Students, the age at Matriculation should certainly not be less than eighteen, as before that few can be considered qualified to enter upon the studies necessary for their future profession, or at least to enter upon them with advantage.

Every parent who intends to send a son to the University should therefore pay particular care to his preparatory education. Thoroughness in everything should be esteemed essential. The more

the boy knows the better : but a small amount thoroughly mastered, is far better than a much larger learned in a superficial manner. A thorough knowledge of his own language ought to be looked upon as of the utmost importance, although at many schools it is regarded as of quite secondary consideration. To this should be added familiar acquaintance with Latin and Greek Grammar, and a careful perusal of portions of Cicero, Virgil, Horace, Xenophon and Homer. Other authors may be added with advantage, if time allows. Of modern Languages French is the most important, and opportunities for acquiring it are accessible to almost all. History, Geography, Arithmetic, Algebra, to Simple Equations at least, three Books of Euclid, and an elementary knowledge of Natural Philosophy and Natural History, will complete the requirements, and will enable the student to enter with advantage upon his College course.

In urging the above I am influenced by my own experience, and by that of others well qualified to give an opinion in such matters.

SONNET.

A mon ami S.

Lorsque dans le passe tout pensif je me plonge,
Maint triste souvenir se presente a mes yeux.
Il me semble parfois que ce n'est qu'un vain songe
Que viendra dissiper un matin radieux.

Helas ! il est trop vrai, ce n'est point un mensonge,
Un cauchemar, un reve, un caprice des dieux,
Sur lequel a plaisir on pent passer l'eponge
Comme fait le buveur des fumees du vin vieux.

Consolons-nous pourtant.—La vie est un voyage
Que doit faire chacun,—triste ou gai, faible ou fort,
Bien sur qu'il atteindra le meme but : la Mort.

La Mort, c'est le repos, le calme apres l'orage.
L'heureux, le satisfait pent y voir un naufrage ;
Mais rejoignons-nous, car pour nous c'est un Port.

POLARIA.

I.

ON FIRST AND SECOND LOVE.

Which, reader, is the more real and true ?

First love, answer many voices. First love; nothing half so sweet in after life. Nothing which gives so much pleasure and soft pain, dear to the heart; nothing so pure, so true, so lasting.

What of second love, then ?

It does not exist, again answer the many voices. There is no love but first love, all else is shadow.

Do you believe this, reader, or have you passed through sufficient sorrow and disappointments enough to learn the truth and greatness of second love? Of that love which "alters not where it alteration finds," which is truer, purer, more sublime than that first gust of passion, that first outburst of life's exuberance which the young uphold above all else?

First love is more vivid, more passionate, more expressive than second love, but it is less noble, less pure, less lasting and less deep.

In the spring of life, when all is bright around, the kindly sun beaming in unclouded splendour, earth's richest treasures scattered freely abroad, when the heart, careless still and gay, bursts into song at sight of flower or blue sky, seeing not, because it suspects not, the clouds slow-rising behind the far distant hills, and feels mighty impulse from within itself to share with all its own unspeakable joy, it is passing sweet to meet that other heart full, too, of yet unrevealed emotions and treasures of delight, and to pour forth all, all that pent-up flood of dim aspirations, lovely fancies, graceful imaginings that till now vainly sought expression and shape. Most sweet to hear the glorious melody of the low-breathed whisper—"I love thee,"—to wander through shady lane, through grove and forest, by murmuring streamlet, and over daisy-spangled meadow, to watch the colour changing on the cheek, as change the

tints of even sky, to feel the pressure of the loving hand—all these are sweet, most sweet.

But is this love?

Or is it the flush of passion?

The latter, methinks. It thinks of nothing but its present gratification, of nothing but pleasure endless, and impossibility of pain. It is full of torments, say you, though sweet torments? Nay, mere fanciful troubles are they, not real ones; talk not over much of the suspense—why, what gives the eventual happiness but that very temporary doubt? What makes the hour of meeting so precious but the moments spent in waiting?

See. There comes a youth, comely, brave, high spirited. He but now enters on the world. He feels boiling within him the fieriest glow of life; his step is light and active, his glance keen and flashing; no indecision in his air—he is sure of his powers. Yet 'tis a mighty stream this now rolling at his feet. So plunges he boldly into its waters, and strikes out with strong arm. He cleaves the flood with ease; it hinders not his way, but rather bears him on; success is his, he has reached the farther shore. How proudly he steps to land, and what slight contempt in his backward glance at the traversed river. Now will he meet yon fair maiden, whose blue timid eyes are scarce raised to his, whose sunny locks will—*have* caught him in their meshes. The pair passes on, from the stream-side to the violet-studded bank in the wood: they feel new emotions suddenly kindled, their hearts beat faster, their words seem fraught with a meaning they never bore before;—they part, only to long to meet again, and meanwhile are haunted by each other's image. She sits down by her trellised window, and gazes pensively out into the calm summer twilight sky, and recalls his every word and gesture—goes over, in her heart, Marguerite's "He loves me—he loves not me," till faint and weary with delicious thought she drops away to a sleep, pure and full of dreams. He, vainly essaying to follow some author's plain enough meaning, forgets his book and brings up vision after vision, making remembrance enrich reality; pines for fame, fortune, power, to lay at her feet—swears to obtain them for her sake, to win crowns even, if

she require it of him, and frets and frets till the next day's slowly sinking sun marks the approaching hour of meeting.

And thus the tender idyll goes on, and the lovers weave for themselves a life of uninterrupted bliss, till the time comes when they *must* part. Oh, what piteous sighs, what sobs, what murmurings! Yet so wills stern fate, and they are severed.

Expect you now deep suffering in either case? Be not deceived: both will mourn bitterly for a time,—for how short a time you little guess,—will refuse all consolation, all comfort; will hug their grief as 'twere a treasure, and then?—and then forget all the foolish, puling wails, childish rebellion and useless repining, and go on till dawns on them the mysterious splendour of real Love.

Second Love. Alone worthy of the name, alone possessing depth, duration, nobility, power. Really Love, *not* Passion.

Love is neither very demonstrative nor very visible to other eyes. It conceals itself carefully even from the object it sanctifies, until it finds response there, and then as carefully remains hidden in that sweet secrecy. It shrinks from making itself known to the outward world, to the crowd of inquisitive friends, whose comments it cannot bear. It feeds on itself, then, because it is constantly supplied from the heart it has conquered; it wants nought else, for is not the response it enjoys all that it cares for, and caring for no more, it is wealthy.

It is ennobling, for it seeks not its own gratification, but that of the being on whom it has bestowed itself. Love is, properly, the sum of the efforts of one person to render another happy. By every means in its power, and how full of resources is Love, it strives to perfect the bliss of the other, and truly gives an earnest of Heaven. Smoothing away obstacles, binding up wounds, finding consolation, lightening burdens, tempering adversity, these are the properties of love.

Once more let us watch the progress of him whom we of late saw in the flush of passion.

He has now fronted the battle of life. Fiercely it rages, and bravely he bears his part in it. But not now is he borne onward by the flood; the vast waves rise in dread opposition, and weary

him through constant and steady resistance. No longer does he press through scatheless; more than one wound has he already received as he pursued his object, the gaining of that crown all are eager to reach. Less frequent fall his blows, less strong his advance, his steps grow weak, other men push him roughly aside—he is compelled, for a season at least, to withdraw from the conflict. He retires to a lonesome spot, removed from the turmoil of battle, the din of which falls fainter on his ear—he seats himself, half-fainting, half-desponding, on a mossy bank. He looks with sickened eye on the combat raging below, his only wish to return and strive once more to attain to the glittering prize, yet unable so enfeebled as he by his last encounter. And now, soft and low, he hears the voice of memory, which recalls that bright, that happy time when he first met her who lent additional brightness to the sun-rise of his life—he treads again in imagination, the woodland park thick sprinkled with flowers, feels once more the light pressure of the hand that never again will be in his,—down sinks his head upon his breast anguish-racked, and he groans that life is desolate, that he has now no object. Slow wane the hours, darkness falls on the scene, the birds are all silent, the clang and tumult die away. He sleeps.

With morn he wakes again. But strange, his wounds are bound, his fevered head cooled, his heart, last night so restless and disturbed, now quieted and calm, his strength returned, his purpose renewed, his will redoubled. A wondrous sense of hitherto unknown comfort has stolen over him; he feels that a new element has been introduced into his life; he sits up, gazes around—in the valley below the fight is again waging—he starts to his feet, an impulse sudden and quick bids him hurry down; that crown which but yesterday he despaired of, he now is assured of obtaining, such new vigour is he possessed of. But ere he goes, he must know whose hand it is that has tended him—yonder, a woman, shyly concealing herself behind the moss-grown trunks—

“Was it you who—”

“Yes; please forgive me. I could not help it.—You were wounded, and looked so ill.”

"And you, you nursed and watched me? All night?"

"It was nothing."

"It was much. You have brought me back to life."

And then he finds she too has to traverse that raging host in the valley, and he now uses the strength she has restored in him to protect her. He shields her from the blows that thickly fall, from the pressure of the crowd, from the numberless dangers that threaten them. She, on her side, has been ever ready to sustain and cherish him, when nigh overcome by the fierceness of the struggle, her voice has nerved him to repeated effort, her glance to increased prowess. Yet the rest of the host have scarcely noticed this companionship, for he not once let her be seen by the striving multitude.

And so go they on till the fight is fought and the victory won.

True Love is capable of any sacrifice. Whatever may tend to increase the happiness of the one heart, ask boldly from the other, and you will obtain it, for real Love is conspicuous through its forgetfulness of self. And with every sacrifice accomplished, increase the delight of self-denial, and the power to continue. Thus is it that Love becomes lasting. And farthermore, it has the brightest and sweetest memories attached to each good deed, and these memories never fading, but, on the contrary, ever waxing fairer and fairer, hold out such a sure reward to forgetfulness of self, that the heart only asks for farther opportunities of lavishing its treasures on its companion.

"Quien no ama, no vive," says the Spanish proverb. Who has not loved, has not lived.

Has the man ever lived who never loved? Was there ever one whose soul, at one moment of his life or another, did not awake to higher strains than the sounds of his daily toil? What though the response never came? Though adverse winds carried away the longings of the two hearts to the very depths of the sombre woods, and scattered them in the corners of heaven? Was it less love, for being unrequited? It was imperfect, but it *was* Love.

Who has not loved? As we look round upon the circle of beings placed more immediately within the range of our observation,

we single out one, two, perhaps three, whom we emphatically declare to have never loved; to them we ascribe, in the beautiful words of Tennyson,

.....what may count itself as blest,
The heart that never plighted troth.

Neither poet nor observer envy such, or, at all events, envy such for more than a moment. They have escaped the toil, trouble and peril, of the passion; they have, undisturbed by what are not always *softer* influences, progressed steadily onward towards the fulfilment of their hopes in life; if tossed on a stormy ocean, they have not, at the time when the tempest waxed fierce and the huge waves boiled up, seen the flames suddenly burst out and greedily lick their masts, already groaning under the fury of the gale.

Yet when some friend has come to them in sorrow, smarting with wounds fresh at heart, they have—with all the skill of practiced doctors who tend the body—relieved the sufferer, poured palm of comfort on the quivering soul, and restored to it, if not all, at least great part of its former strength—they have given it back the vigour of which the stroke of misfortune had robbed it, and fitted it for the renewed strife.

All this with the gentle, soft touch which it pleased the poor, plain one to feel, for it was light as the touch of angel-wing, that sure as that of science.

'Tis these who, men say, have not loved.

Look deeper. Try to penetrate through the calm, composed expression of face—watch every throb of that heart—tear asunder the heavy veil that mantles round it; sound every gulf, for the human heart is in itself the Infinite,—peer down as far as you can, if possible below those still waters of unruffled surface, of great silence, and sunk immeasurably beyond mortal ken, you would see shining one bright gem; a star still effulgent in the gloom of that inner night. The rays of that star, brilliant beyond thought, would dazzle more than the beams of tropic sun, filled as they are with the intensity of human sorrow and god-like suffering.

That star, hidden within the inmost recesses of that cold, sighless bosom, is the essence of all your torments;—yours have been

relieved, softened—these met with no comforter, but preyed on the heart, burned, seared it, causing it agony indescribable, purifying it, redeeming it, hallowing it, and finally, having consumed themselves by their very fierceness; passed away, and left behind this priceless treasure, this sublimation of Good, this heart which, unknown to all, is loving all.

Were you able to search out the gone years of those beings were you shown by some archangel the living record of their deeds and thoughts and words, surely you would light upon some passage unknown probably to everyone, or, if once suspected by a few now unremembered. That passage would read most sweetly, most mournfully. It would reveal a battle between duty and inclination; it would chaunt a dreesome lay of wrestlings and struggles of secret combats, of fateful moments, of victories long undecided won at last by sore energy. It would have, in the midst of its painful memories, snatches of light melody, of airy songs, burdens of music and flowers, glimpses of sunshine, brilliant hopes, which again would pale as the cloud grew darker and darker, slowly swallowing up the fairest scenes, and changing to Cimmerian night the glory of the noon of the heart.

“I have loved. I have lived.”

LE JUIF ERRANT.

DEEP SEA EXPLORATION.

BY JOHN HUNTER, M. A., F. R. S. E., F. C. S., Professor of Mathematics, King's College, Windsor.

VARIOUS opinions were long entertained by naturalists on the subject of the existence of animal life at very great depths below the surface of the ocean, and it was only when more complete investigations were undertaken by the British Government, during the summers of 1868 and 1869, that the question as to whether life became more and more scarce, and finally extinct, as the depth increased from 200 fathoms downwards was decisively determined. One of the earliest records of deep sea dredging is contained in Sir John Ross's account of his Arctic Expedition; the ship sounded 1000 fathoms, between one and two miles off shore, (lat. $73^{\circ} 27'$ N., and long. $75^{\circ} 25'$ W.,) and the line brought up attached to it evidence of animal life at this depth. In another sounding in 1050 fathoms a small starfish was found on the line, below the 800 fathom mark. The late Professor Forbes carried on an extensive series of investigations with regard to the nature of the animal life at different depths, and arrived at the conclusion that none would be found at a greater distance below the surface than 300 fathoms. He himself did not examine the sea bottom below 230 fathoms, but his eminent position as a naturalist caused his opinion to be almost universally adopted by his scientific contemporaries. His views, however, were not confirmed by the results obtained during the expeditions of Sir John Ross and Sir John Franklin, in both cases life was found in depths ranging from 270 to 400 fathoms. The theory of Professor Forbes was no doubt calculated to meet with very general support, for everyone considered that the conditions a mile below the surface of the ocean would be so anomalous as to render the existence of creatures, of the same nature as those nearer the surface, difficult if not impossible.

In the year 1864 a very distinguished naturalist, G. O. Sars, was sent by the Swedish Government on an expedition connected with the Commission on Fisheries, and he had thus an opportunity of dredging in deep water, within the Arctic circle. He found that the inhabitants of the bottom of the deep sea did not accord at all with the theories of Professor Forbes. He succeeded in bringing up very numerous specimens of animal forms, many quite new to science, and all of the greatest interest in connection with geology. One form occurred in large quantity, it was a variety of stalked starfish or "crinoid." The creature was supported on a thin stem, a few inches long, and the head closely resembled the intermediate stage of an allied group, known as the "Feather stars," which are by no means rare on the Norwegian coast. Farther examination, however, proved that the newly discovered crinoid was a mature form, and belonged to another family of the order before this time known as fossils. Thus Sars showed that in our own seas there was a living representative of a family previously supposed to have disappeared and become extinct. No wonder then that this remarkable fact caused in the naturalist world a strong desire to investigate still more fully the conditions and distribution of animal life in the great sea depths.

Previous to the expedition of Sars, H. M. S. "Bulldog" had been employed to make a series of soundings in the Atlantic basin, and during the cruise a number of observations were carried on, with a view to determine the nature of the inhabitants, if any, of the sea bottom; but although evidence of life was found in these researches it was very defective, depending principally on starfish clinging to the lead lines; the subject attracted little attention, and naturalists continued to favour Forbes' "Zero of Animal Life."

At the time of the Sars expedition, Dr. Carpenter, F. R. S., the celebrated Zoologist, and Dr. Wyville Thomson, F. R. S., (Professor of Natural History, Queen's College, Belfast,) were engaged in certain enquiries which rendered the discovery of the new "crinoid" of peculiar interest to them, and after thoroughly discussing the importance of prosecuting these investigations, it was decided that Dr. Thomson should write to Dr. Carpenter, then

Vice-President of the Royal Society, describing the facts which remained to be fully ascertained, and also containing a general sketch of the results likely to arise from such a line of research. It was also suggested that in case the Council of the Royal Society considered the subject one of great scientific importance, they should request the Admiralty Board to permit one of Her Majesty's vessels to be properly fitted up with all the requisites for deep sea dredging, and devoted to this purpose during the summer months. It was thought that the question of deep sea life might, under these circumstances, run a fair chance of being finally elucidated, by obtaining a quantity of the bottom, and observing the nature of its inhabitants.

The Royal Society having expressed a favourable opinion of the scheme laid before them by Drs. Carpenter and Thomson, the surveying steam-vessel "Lightning" was placed at their service during a portion of the summer of 1868. For various reasons, it was decided to examine the sea bottom off the north of Scotland, and in the neighbourhood of the Faroe Islands. Unfortunately for the success of the expedition, the weather proved unexceptionably unfavourable, and during the whole cruise—a space of six weeks—the dredge could only be sent down on nine days, and out of these only four times in deep water. The dredging on the Faroe banks yielded but poor results, and after remaining a short time at Thors-haven, the vessel proceeded on a south-easterly course, and some time was occupied in the investigation of a "cold area" where the bottom was partly stoney and partly sandy, and the temperature had sunk to 32° F.; in this region animal life was thinly distributed, and by no means of a high order. Shortly afterwards an opportunity occurred of dredging in 530 fathoms, and a quantity of fine grey mud, or "ooze" was brought up. We shall now briefly sketch the results obtained during the cruise of the "Lightning," partly abstracted from the report of a lecture delivered by Dr. Wyl-ville Thomson, before the Royal Dublin Society, and partly from the "Report of the Lightning Expedition," read before the Royal Society of London.

In all deep sea investigations, it is most important to determine

with great exactitude the precise depth, and recently the great improvements made in sounding instruments render this operation one of accuracy. By a variety of arrangements, the nature of the bottom can be ascertained by the examination of small quantities brought up by the sounding line. Previous to laying the Atlantic cable, the deep sea area between the west coast of Ireland and America was carefully surveyed, and samples of the bottom brought home for investigation. In every case the bottom was found to consist of fine mud or "ooze," formed, it may be said, of enormous quantities of the calcareous shells of a Rhizopod, Globigerina, and other allied forms. The ooze exists over the large plain which extends from Valentia to Newfoundland, having a depth of about 2000 fathoms, and gradually becoming deeper in a more southerly direction. Now a microscopic examination of the great chalk formation of England reveals the interesting and important fact, that in every essential point it is identical with the ooze, and is formed of the small spherical shells of Globigerina and its allies. Hence it was at once rendered apparent that the nature of the chalk formations of England was identical with the vast deposit of ooze composing the bottom of the Atlantic, the only question remaining unsolved being, whether these small organisms really lived at the depths where the soundings were made, or nearer to the surface, and after death had sunk down to the bottom.

One object of the Expedition was to determine the temperatures of the bottom and surface water at each sounding station, and we may here remark that as sea water contains a very considerable number of salts dissolved in it, we cannot expect to find a uniform temperature of 39° F. at a certain depth. Were the ocean composed of fresh water, we should then have it, when excluded from the influence of the sun's heat and warm or cold currents, maintaining a uniform temperature of 39° F., its point of maximum density. Sea water, however, from the causes above mentioned, does not cease to contract when cooled below 39° F.; it diminishes steadily to its freezing point, which is about 28° F. when agitated, and 25° F. when left perfectly undisturbed. Although one source of error prevented very great accuracy in the "Lightning" thermometric ex-

periments, yet enough was done to settle definitely several facts connected with the temperature of the deep sea. At some distance from the coast of Stornoway, two thermometers, sent down in 500 fathoms, indicated a temperature of 49° F., and subsequent observations confirmed this result; namely, that the temperature was almost constant throughout the warm or Gulf stream area of the region. In the neighbourhood of the Faroe Islands, the three registering thermometers gave a mean result of 32.2° F., in 510 fathoms water, almost exactly the freezing point of fresh water. It was then found that a "cold area" extended from about Lat. 60° and 61° N., to Long. $4^{\circ} 30'$ and $7^{\circ} 30'$ W., at a depth varying from 400 to 500 fathoms, and that another area stretched north-westward, westward, and south-westward of this cold area. One explanation of the cause of the warm area naturally occurs, namely, that the Gulf stream affects the temperature of the sea to the very bottom, and that its influence is so considerable as to render the temperature 49° F. over a very large region. But it is not so easily seen why the cold area remains a few degrees above the freezing point of salt water.

In the warm area above mentioned, the dredging results consisted of large quantities of ooze, containing globigerinæ, although not in such large numbers as at some of the other stations, but it was on this part of the cruise that a discovery of very great interest was made:—on one occasion a number of sponges were brought up, mixed with mud, living, and having a series of beautifully formed spicules suspended in the transparent walls of the animals. These sponges possessed extensive beards, formed of fine threads of silica, extending in every direction through the surface of the ooze. Some of them were nearly allied to the Venus' Flower Basket of the Philippines, while two specimens appeared to belong to the species *Hyalonema*, the strange glass rope sponge of Japan. These creatures, covered with sarcode, were buried in the ooze nearly to the lip; the mud contained quantities of the siliceous fibres of the vitreous sponge, and was so filled with the sarcode as to appear as if mixed with white of egg.

Further examination of the ooze proved conclusively that at the

present time a vast chalk formation is being gradually deposited in the depths of the Atlantic, and not only is it *chalk* which is accumulating in the ocean bed, but it is *the* chalk of the cretaceous period. There is certainly reason for assuming that no very great change has taken place in the crust of the earth since the Mesozoic period, and those great depressions, the Atlantic, Pacific, and Antarctic oceans, existed even before that remote epoch. Small changes have undoubtedly occurred, but the formations once existing during the period of depression, and now raised by some upheaval, are all local and shallow water beds. In fact we have no cause to suppose that the physical and biological conditions of two-thirds of the ocean have been much changed by causes which affect the different relative positions of sea and land; unquestionably temperatures have altered as climates, from whatever cause, become more or less tropical, but the effect of this will be found in the gradual transformations which appear in the chalk fauna during countless ages.

When a fragment of chalk is dissolved in an acid, we have always a small residue, consisting of silica, which we have every reason to suppose to be of inorganic origin, in fact a fragment of some mineral. Very frequently we find large masses of flint, adapted to the cavity existing in the chalk bed; many of these flints are quite shapeless, but again many of them possess the form and general appearance of one of the cup shaped sponges. To explain the presence of the flints was long felt to be a serious difficulty, and the only probable explanation rests on the celebrated investigations of the late Master of the Mint, Thomas Graham, F. R. S., on Crystalloids and Colloids. It seems possible that the organic silica being dissolved out of the calcareous matrix, the solution filters through the walls of the cavity which act as a porous diaphragm, and the water is gradually drained away from the silica which is in the colloid state, and slowly hardens in the vacant space.

In concluding the report laid before the Royal Society, it was suggested that results of great importance might be obtained by instituting a series of Physical observations in addition to those more intimately connected with Natural History. For instance,

(1) to determine the temperature not merely of the bottom but also of various lesser depths above it; (2) the relative composition of the water at different depths; (3) the proportion of the gases contained in the water at the various depths.

During the summer of 1869, H. M. S. "Porcupine" was placed at the service of the Royal Society, for the purpose of prosecuting the researches so successfully commenced the previous year. Some changes were made in the nature of the investigations; a Physical department was organised, and arrangements made to examine as carefully as possible the nature of the sea water brought up from various depths. A change was also made in the form of thermometer adopted. A series of experiments had been instituted during the preceding winter, with a view to calculate the effect which great pressures, such as deep sea thermometers are constantly exposed to, would have on the temperatures registered by the index. It was found that considerable errors arose from the diminution in capacity of the bulb, the indications from this cause being too great. The late Dr. W. A. Miller, F. R. S., devised a simple arrangement to remove this difficulty, which was found upon trial to be perfectly successful. The thermometers employed were constructed on Six's principle, and the method used by Dr. Miller to protect the thermometers from the effects of pressure, consisted simply in enclosing the bulb in a second or outer glass tube, which was fused on the stem of the instrument, the space between the inner and outer tubes was nearly filled with alcohol, leaving a little space to allow of variation in bulk due to expansion. The spirit was heated, to displace the air by means of the alcohol vapour, and the outer tube with its contents hermetically sealed. In this way external pressures are prevented from affecting the bulb of the thermometer within, whilst the changes of temperature easily penetrate to the inner bulb. The instruments were enclosed in a copper case to protect them from any accidental shock, openings being left for the free passage of the water. A number of experiments were made, in which several protected and unprotected thermometers were placed in a strong iron vessel, filled with water and exposed to a hydraulic pressure, extending to three tons on the square inch. The indications of the

unprotected minimum thermometers were invariably too great, while the records of the protected thermometers always agreed closely. By this improvement of Dr. Miller's our instrument was constructed so as to yield very trustworthy and accurate results.

Before proceeding to describe the various arrangements adopted on board the "Porcupine," in order to accomplish successfully the scientific objects of the Expedition, it may be more advisable to give an account of the programme of the work during the summer. The vessel was a paddle steamer of about 382 tons, possessing sufficient accommodation to carry a supply of coal capable of lasting for a fortnight's cruise when dredging, as of course great speed was not required, in fact would have been a serious evil, in the service in which she was employed. The scientific corps of the first cruise of the season was composed of John Gwyn Jeffreys, Esq., F.R.S. chief of the Natural History department, and W. L. Carpenter, Esq., had charge of the Physical investigations, connected with the composition of sea water. Starting from Valentia, a series of dredgings were made in different depths off the Irish coast, the deepest being about 1600 fathoms; they then proceeded in a northerly direction towards Rockall, and after having obtained a number of valuable and interesting results, the "Porcupine" arrived safely at Belfast, from which place Dr. Thomson and myself had made arrangements to start on the second portion of the summer's work. Professor Thomson occupied the position previously filled by Mr. Gwyn Jeffreys, and I had charge of the Physical section. On coming on board, it was impossible to avoid noticing the numberless coils of rope suspended along one side of the quarter deck, on a row of iron rods, terminating in round wooden balls, which soon received the sobriquet of "Aunt Sallies," from their resemblance to the figure of the principal passive personage in that interesting game. The dredging line consisted of about four miles of strong; two and a half inch rope, most carefully selected for the efficient discharge of its responsible duties. Placed at the inner side of one paddle box, was the small donkey engine, whose office it was to bring up our dredge or sounding line as rapidly as possible, and certainly this pretty piece of mechanism performed its arduous

functions thoroughly well. One derrick was placed over the stern, and another at the bow, so that we could send down the dredge or sounding line in whatever position was found most convenient. A very ingenious method was used to take the strain off the rope, when working at great depths. Imagine two circular wooden discs, about a foot in diameter, secured to each other at an interval of three or four feet, by numerous solid cords of vulcanised india rubber, each about half an inch diameter. When the dredge was overboard, a bight was taken in the rope, and the "Accumulator" placed in the interval, the result was that when the dredge met with any unexpected obstacle impeding its progress along the surface of the bottom, the first tension came on the elastic cords, and as these yielded gradually and then relaxed as the pressure ceased, the danger of snapping our valuable ropes was greatly diminished. The dredge itself consisted of a strong iron frame, with sloping lips, calculated to detach any object at the bottom; the net attached was strong, and enclosed in a bag of hide, in order to prevent the escape of even the smallest creatures. Several different forms of dredge were employed during the summer. One improvement devised by our able captain, Commander Calver, added greatly to the success of the northern dredgings, it consisted in attaching bunches of rope fibres to the dredge, and these entangled any animals, such as siliceous sponges.

The objects of the Physical department of the expedition were certainly of the highest interest and importance. Pure water has the property of dissolving a certain quantity of the gases contained in the atmosphere, and sea water is also largely aerated with various proportions of the three gases, Oxygen, Nitrogen, and Carbonic Acid. What effect have depth, temperature and animal life, on the presence and relative quantities of these gases; is the amount the same in every layer of the ocean, or does it vary according to some law yet to be discovered? These were questions remaining to be solved. Again, was the sea equally salt throughout its whole extent, did the specific gravity change with the depth, and finally, was organic matter present in every part of the deep? A former objection to the existence of animal life at great depths, had been

the absence of any conceivable source of food, and certainly this appeared to be a serious obstacle to the views of those who were antagonistic to the ideas of Professor Forbes. It occurred to Dr. Wyvill Thomson, however, that it was just possible that organic matter in a state of solution was distributed throughout the ocean. By means of certain reagents the presence and comparative amount of organic matter can be ascertained, and during the expeditions these important observations were carefully carried out. During the first cruise, Mr. W. L. Carpenter performed a successful series of experiments, and found, as a general result, that the bottom water contained more carbonic acid than that nearer the surface; the nitrogen remaining nearly constant, and the oxygen and carbonic acid changing places. Organic matter was found in every part of the deep sea, and these results are fully confirmed by my own. Before giving an account of the cruise on which I was personally engaged, I think it better to describe briefly the history of the subjects in which I felt especial interest.

* Comparatively few researches have been carried on with the object of determining the precise amount and nature of the gases which are dissolved in sea water at any great depths below the surface. During the voyage of the "Bonite" in the years 1836-7, samples of sea water were collected, carefully sealed up in flasks, and brought home to be analysed in the laboratory of the College of France. M. Darondeau,† in a paper read April 30th, 1838, gives the following table of the results of these analyses:—

* Reprinted from the Journal of the Chemical Society, January, 1870.

† Comptes Rendus, t. vi, p. 616.

Date & Place.	Lat.	Long.	Depth in fathoms.	Density 8° to 10° c.	Gas in 100 c.c. of water.	Composition of 100 vols. of gas.		
						Carbonic acid.	Nitro-gen.	Ox'gen.
Aug. 30, 1836 } Pacific Ocean. }	11 8 N.	108 50 W.	{ surface 70	1025.94 1027.02	2.09 2.23	10.51* 18.06	83.33 71.05	6.16 10.09
Mar. 19, 1837 } Bay of Bengal }	11 43 N.	87 18 E.	{ surface 200	1025.45 1026.63	1.98 3.04	13.97 58.15	80.50 38.50	5.53 3.29
May 10, 1837 } Bay of Bengal }	18 0 N.	85 32 E.	{ surface 300	1026.11 1025.86	1.91 2.43	13.32 80.18	80.34 64.15	6.24 5.72
July 31, 1837 } Indian Ocean. }	24 5 S.	52 0 E.	{ surface 450	1025.77 1027.39	1.85 2.75	12.46 84.92	77.70 55.23	9.84 9.85
Aug. 24, 1837 } Atlantic (Sth) }	30 40 S.	11 47 E.	{ 400	1027.08	20.4	28.82	67.01	4.17

The surface waters were all perfectly transparent, but those collected from a greater depth contained white flocculent particles. The amount of gases held in solution was determined by boiling the water in a flask, and collecting over mercury. In conclusion M. Darondeau states that the total gas in sea water is less near the surface, and the difference in amount increases considerably with the depth. The gas from the deeper water contains more carbonic acid than that from the surface, but this result may have arisen from the decomposition of the flocculent matter previously mentioned.

A few experiments were performed on board the "Bonite" with the following results:—

Pacific Ocean.—September 12th, 1836. Lat., 16° 53' N.; long., 118° 13' E.; depth 380 fathoms. 103 c. c. of the water contain 1.62 c. c. of gases.

Near the Philippine Islands.—November 21st, 1836. Lat., 18° 22' N.; long., 132° 13' E.; depth, 300 fathoms. 100 c. c. of the water contain 2.20 c. c. of gases, and 100 c. c. of surface water 2.27 c. c.

Chinese Sea.—November 29, 1836. Lat., 18° 0' N.; long., 117° 30' E.; depth 300 fathoms. 100 c. c. of water contain 3.89 c. c. of gases.

* The carbonic acid in this experiment is uncertain.

On the coast of Algiers M. Aimé * examined the amount of air contained in sea water from various depths, and concluded that either none, or only a very small quantity, was dissolved. Water from 65 metres gave only from 0·01 to 0·02 of its own volume of air, and from 1249 and 1606 metres, no air, or at least only a few bubbles.

According to Bischof † 10,000 parts by weight of water contain :—

			<i>Observer.</i>
Mediterranean....	1·1	by weight of carbonic acid—	Vogel.
Atlantic.....	2·3	“ “	“
English Channel..	2·3	“ “	“
The same.....	0·77	“ “	Bischof.

Some observations indirectly connected with this subject were made by M. Aimé ‡ on the nature of the gases evolved by marine plants. He found that algæ give off carbonic acid in the dark, and decompose it under the influence of light.

A. Hayes§ observed that there is more oxygen in surface water than at depths of 100 to 200 feet.

M. Morren|| made a series of experiments during the years 1836–37 on the quantities of gases held in solution by sea water at different seasons of the year. He found that sea water dissolves less air than fresh water, that the latter gives off more in proportion of the contained gases on boiling, and that the carbonic acid constitutes from 9 to 10 per cent. of the gases. If the sea be agitated and exposed to diffusè sunlight, the quantities of oxygen, nitrogen, and carbonic acid are capable of great variation. The oxygen and carbonic acid are in inverse proportion to each other, but the numbers are not identical, and do not form a constant sum. In consequence of the quantity of dissolved gas being much greater on a fine day, we have the oxygen varying from 53·66 to 29·70

* Ann. Chim. Phys, t. 2, p. 535.

† Chemical and Physical Geology, i, 113.

‡ Poggendorff's Annal., lx, 404.

§ Sill. American Jour., 1851, p. 421.

|| Ann. Chim. Phys. (3), xii, 5.

per cent., but in ponds and near the sea-shore these limits are increased to 20.78 and 76.04.

The principal determinations of the composition of the air over sea water have been made by M. Lewy,* who found, during a voyage to Copenhagen, that the air over the sea varied more than that over the land in proportion to the different solubilities of the gases. Mr. E. T. Thorpe,† in a valuable paper read before the Chemical Society, concludes that the sea does not increase the amount of atmospheric carbonic acid, but that the air over the sea contains proportionally much less carbonic acid than that over the land.

It will be seen from these abstracts that very little has been done towards the investigation of the gases contained in the ocean at any great depth, and that the various experiments made with this object have not by any means yielded identical results.

In the Porcupine expedition specimens of water were procured by means of a large brass tube attached to the sounding line. This tube had two carefully fitted valves placed in it, one at the upper end, the other below, but both opening upwards, so that, when the instrument was descending, the water flowed freely through it, but on proceeding to draw it up, the pressure of the external water closed the valves, and the sample of the last water which had entered the tube was secured. The method worked perfectly, except when the sounding line came up at a great angle, in which case the valves seemed not to hold in quite so well as when the line was brought up perpendicularly.

Having got the water on board, one portion of about 800 c. c. was placed in a flask, and the gases determined by boiling, according to the method of the late Dr. Miller. In every case the total gas was divided into two portions, so that duplicate experiments could be obtained. The amount of organic matter in two quantities of water of 250 c. c. each was observed by Dr. Miller's pro-

* *Ann. Chim. Phys.* (3), viii, 125, and (3), xxxiv, 5.

† *Chem. Soc. Jour.* (2), v, 199.

cess,* and the specific gravity was taken with great care by means of two or three instruments.

It will be observed that the tables consist principally of two sets of experiments made on waters taken from the bottom and intermediate depths in the same locality. In both of them the bottom water was muddy, and the succeeding specimens quite clear. In the first experiment of second series, the quantity of dissolved gases was very great, so that on a slight elevation of temperature it began to escape. It is to be regretted that I had not more opportunities of examining surface waters, but this was unavoidable, as the number of intermediate waters brought up required constant attention, and had to be analysed as soon as possible. With regard to the composition of the gases, the carbonic acid was found in each case to be in greatest quantity at the bottom; it then diminished a certain amount, and remained pretty constant until within about 100 fathoms of the surface, when it diminished still more. The specific gravity of the bottom water is rather less than that of the surface in the first series, while in the second the two are identical. The amount of organic matter is about the same in bottom and surface water. In every case where a specimen of water was brought up, the temperature of the water at that depth was ascertained, and the volumes of the gases in the following tables are reduced to those temperatures and 760 mm.

* Chem. Soc. Jour. (2), iii, 122.

FIRST SERIES.

Lat. 47° 39' 0", Long. 11° 33' 0". July 23rd, 1869.

Depth in fathoms.	Temp. Fahr.	Sp. gr. of bottom and intermediate waters.	Sp. gr. of surface water.	Grms. of oxygen for 250 c.c.	Total gas in 100 c.c.	Composition of 100 vols. of gas.		
						Carbonic acid.	Nitrogen	Oxygen.
2090	86.4°	1027.3	1027.5	.0016	2.80	35.92	43.54	20.54
1750	86.8	1027.5	..	.0012	—	34.10	45.20	20.70
1500	87.2	1027.5	..	.0017	2.87	31.76	48.04	20.20
1250	87.7	1027.5	..	.0015	2.90	32.00	47.74	20.26
1000	87.8	1027.5	..	.0010	2.60	30.10	49.20	20.70
750	41.4	1027.3	..	.0006	6.20	28.62	49.44	21.94
500	47.8	1027.4	..	.0010	2.80	28.10	49.70	22.20
250	50.5	1027.4	..	.0014	2.70	25.12	52.42	22.46

SECOND SERIES.

Lat. 49° 12' 0", Long. 12° 52' 0". July 27th.

Depth in fathoms.	Temp. Fahr.	Sp. gr. of bottom and intermediate waters.	Sp. gr. of surface water.	Grms. of oxygen for 250 c. c. of water.	Total gas in 100 c. c. of water.	Composition of 100 vols. of gas.		
						Carbonic acid.	Oxygen.	Nitrogen
862	39.8°	1027.5	1027.5	.001	3.5	48.28	17.22	34.50
800	42.0	1027.7	..	.001	2.8	38.75	17.79	48.46
750	42.5	1027.5	..	.0012	2.8	31.92	18.76	49.32
700	43.7	1027.5	..	.0013	—	31.03	19.31	49.66
650	44.4	1027.5	..	—	2.4	30.00	19.80	50.20
600	45.5	1027.5	..	.0005	2.4	28.34	20.14	51.52
550	46.4	1027.5	..	.0009	2.6	29.06	20.70	50.24
500	47.4	1027.5	..	.0014	2.2	27.26	—	—
450	47.6	1027.5	..	.0005	2.8	24.73	22.18	53.09
400	48.5	1027.5	..	.0014	2.5	—	—	—
350	49.2	1027.3	..	.0015	—	—	—	—
300	49.6	1027.3	..	.0018	—	—	—	—
250	50.3	1027.3	..	.0019	—	—	—	—
200	50.5	1027.3	..	.0017	—	—	—	—
50	53.4	1027.3	..	.0014	2.2	—	—	—

MISCELLANEOUS EXPERIMENTS.

Date.	Depth.	Lat.	Long.	Temp.	Sp. gr. of bottom water.	Sp. gr. of surface water.	Grm of oxygen for 250 cc. of water.	Total gas in 100 cc.	Composition of gas in 100 vols.		
									Carb'n acid.	Nitro-gen.	Oxy'gen.
July 20	74	50 88	9 27	49.5	1026.7	1026.7	.001	—	87.88	45.63	16.4
" 21	surface	48 50	10 57	—	1027.7	..	.0002	—	8.27	50.68	37.1
" 21	725	..	..	44.2	10.7.6	1027.7	.0024	2.2	24.85	57.02	18.1
" 23	surface	—	—	—	1027.6	—	.0012	2.4	24.37	50.07	25.6

* As a sequel to the paper previously read before the Chemical Society on the analyses of sea water, performed on board H. M. S. "Porcupine," I examined the composition of the water taken from various depths. In consequence of the very small amounts of the samples which remained, after obtaining the quantity of the gas held in solution, and the organic matter, it was only possible to determine the more important substances contained in them, and, unfortunately, the proportion of potassium at the different depths could not be observed.

The valuable researches of Professor Forchhammer on the composition of sea-water from different parts of the ocean were communicated to the Royal Society in a paper read November 17th 1864. He procured a number of specimens from various depths in the Atlantic Ocean, between Baffin's Bay and the Equator, and found that water from the former place contained the same quantity of salts in the surface and depth; but on passing the most southern point of Greenland, the surface water contained more salt than that from below, the difference increasing towards the Equator. In one case he found that the more dense water occurred between two weaker portions, and one of the series of analyses appended to this paper gives a similar result. He also observed that, in some cases the amount of salt increases with the depth, and in other cases it diminishes. A number of specimens collected between lat. 50° 50'

* Reprinted from the Journal of the Chemical Society, May, 1870.

and 50° 22' N., and long. 12° 6' and 15° 59' W., off the west coast of Ireland, gave 35·613 grammes per litre of salts for the surface-water, and 35·687 for a depth of from 200 to 1,750 fathoms.

Before proceeding to mention the results of the analysis of deep sea water, I wish to direct attention to the composition of Atlantic ooze brought up by the dredge from the enormous depth of 2,435 fathoms. The portion of the ooze reserved for analysis was dried in the engine-room of the "Porcupine," in order to prevent decomposition as much as possible; when taken out of the dredge its colour was grey, which, however, became nearly white on drying. Examined under the microscope, it is found to contain a great number of extremely small shells, apparently formed of carbonate of calcium; in addition to these, there are some siliceous forms. The principal constituents are carbonate of calcium and silica. Before analysing the ooze, the chloride of sodium and other salts present from the evaporation of the sea-water were washed out.

Composition of Atlantic Ooze.

Depth, 2,435 fathoms; lat., 47° 38'; long., 12° 08'.

Silica	23·36
Carbonate of Calcium.....	61·34
Alumina	5·31
Ferric oxide.....	5·91
Carbonate of magnesium.....	4·00
	99·92

The first series of analyses are of waters from the bottom and intermediate depths, commencing at 2,090 fathoms, in the immediate neighbourhood of the station at which the ooze was brought up, so that we may consider the bottom to be of the same composition in the two places. The sample from the greatest depth contains considerably more calcium than any of those succeeding, which may be accounted for by the fact of the water there being in close contact with a sea bottom containing a large amount of carbonate of calcium, while the water itself has more carbonic acid in

solution than any of the superposed layers. All the intermediate depths contain about the same quantity of calcium. The magnesium and sulphuric acid are slightly in excess at the bottom, and the chlorine increases towards the surface. The bromine was about the same all through; it was determined by reducing the mixed bromide and chloride of silver by means of zinc and dilute sulphuric acid, and the results agree as well as can be expected from the very small quantity of salt at my disposal. The total amount is less in the bottom water at 2,093 fathoms than in water at 1,000 fathoms, namely, 36.324 grammes per litre in the former, and 36.473 grammes in the latter. The total amount of salts was obtained by evaporating down a small portion of the water very carefully and slowly; the heat was gradually increased, and the vessel and contents weighed several times until the weight remained constant. It is very difficult to avoid decomposing the chloride of magnesium to some extent; but there was no other means of satisfactorily finding the total salts, as I had not enough left to enable me to separate the potassium and sodium.

The second series contain water from a much shallower part of the Atlantic. In this set we have the amount of calcium and magnesium almost constant from 862 to 100 fathoms; the sulphuric acid is slightly in excess below, and the chlorine greatest above. The salts in this case decrease from 862 to 200 fathoms—36.433 to 36.267 grammes per litre—and then increase at 100 to 36.619, while the 150 fathom water contains 36.701 grammes. A similar case was observed by Forchhammer, and attributed by him to the existence of currents. The 1,270 fathoms water was from the bottom.

The concluding tables show the amount of the other elements, compared with chlorine taken as 100.

Dept.	
	209
	175
	250
	125
	100
Dept.	
	86
	25
	30
	25
	20
	15
	10
	127
	D
Second series.	First series.

FIRST SERIES.

Lat. 17° 30'. Long. 11° 33'.

Depth.	Total salts.	Calcium.	Magnesium.	Sulphuric acid.	Chlorine.	Bromine.
2090	86.324	0.8084	1.5925	3.1002	0.3114	0.8114
1750	86.478	0.5387	1.3080	2.8513	0.4192	0.4192
2500	86.462	0.5885	1.4394	2.8088	0.3081	0.3081
1250	86.309	0.5442	1.8685	2.8220	0.4230	0.4230
1000	86.478	0.5075	1.2275	2.8971	0.4302	0.4302

SECOND SERIES.

Lat. 49° 12'. Long. 12° 52'.

Depth.	Total salts.	Calcium.	Magnesium.	Sulphuric acid.	Chlorine.	Bromine.
862	86.438	0.4149	1.2887	3.1906	19.3350	0.4165
250	86.294	0.4285	1.8708	2.9307	19.2556	0.4625
300	86.395	0.4660	1.3534	2.1123	19.1927	0.4814
250	86.845	0.4885	1.3218	2.9436	19.1827	0.4218
200	86.267	0.4193	1.3534	3.0100	19.1939	0.4005
150	86.701	0.4300	1.3470	2.9519	19.3844	0.4093
100	86.618	0.4116	1.2259	2.7384	19.6770	0.3749

Lat. 50° 01'. Long. 12° 26'.

1270	86.607	0.4720	1.8788	3.0268	10.2391	0.4742
------	--------	--------	--------	--------	---------	--------

CHLORINE = 100.

	Depth.	Total salts.	Calcium.	Magnesium.	Sulphuric acid.
First series.	2090	189.3	4.181	8.236	16.038
	1750	188.5	2.757	6.732	14.728
	1500	186.8	2.758	7.357	14.278
	1250	188.2	2.805	7.062	14.512
	1000	187.8	2.916	6.304	14.880
Second series.	862	138.4	2.145	9.659	16.501
	350	128.5	2.224	7.118	15.219
	300	139.6	2.303	7.005	16.216
	250	139.5	2.546	6.995	15.845
	200	138.9	2.136	7.051	15.671
	150	139.6	2.481	6.948	15.279
	100	136.1	2.090	9.280	13.919
	1270	190.1	2.453	7.116	15.727

The experiment room was certainly rather unlike a well arranged college laboratory, but a little reflection soon proved that stability was the great desideratum afloat, and large jars filled with mercury did not seem so insecure, when surrounded by cotton wool and other packing, as when left to their own resources in a heavy sea. All apparatus capable of being screwed down was firmly attached to the table, and some glass tubes, which formed a portion of the water analysis apparatus, were slung from the roof by wires, so as to prevent the motion having too violent an effect. Any experimenter can easily fancy the difficulties of pursuing scientific researches under such circumstances, yet after a few days' experience, becoming more accustomed to the work, I was always on the watch for some stray vessel to perform an erratic feat of rolling, and directed an occasional glance at the spirit lamps, one of them a giant after his kind, in terror of a sudden descent of ignited alcohol.

It was decided that the destination in the second cruise should be the Bay of Biscay, and when we left the North of Ireland our course was directed towards Queenstown, for the purpose of laying in a supply of coal, at a seaport near to the ground of our future operations. Our start was not propitious, as the pilot made two ingenious but unsuccessful attempts to steer between a mud flat and the shore, fancying that by this means we could avoid taking a more circuitous route; however, we did get fairly under way, and waved our adieus to all friends onshore. Having descended to the experiment room, I packed the fragile apparatus as securely as possible, the mercury being the source of much anxiety, on account of the alarm exhibited by a member of the expedition, who slept in that part of the ship. He naturally thought that exposure to any vapour which might arise from pools of mercury on the floor would not be conducive to his health. Every thing was stowed away, however, in such a manner as to tranquilize even the most nervous of colleagues.

The most influential reason for deciding on dredging in a more southern sea was to examine the great depths of the Atlantic basin previously unexplored. We hoped to be able to find bottom at about 2500 fathoms, and then decide the question, once and for

all, as to whether any evidence of life was to be discovered there. The voyage commenced in beautiful weather, a bright sky and calm sea, and shortly after leaving we had an opportunity of seeing the regatta of the Ulster Yacht Club, while steaming through Bangor bay, in show of the Commodore's cutter. Of course there was the usual display of every description of nautical swell, pulling in all possible varieties of ancient and modern boats. We then passed Groomsport, the Copolands and Donaghadee, continuing our course along the eastern coast of Ireland.

Strange to say, the crew of the "Porcupine" consisted entirely of Shetlanders, with the exception of the men employed in the engine room; it seems that a number of them entered the Government Surveying Service at the same time, and proved to be such good seamen that ever since they have been retained in it; they seemed to be an intelligent set of men, and displayed great interest in the work of the expedition. They enjoy privileges not shared by ordinary seamen in the navy, they are engaged by the month, taken back to their homes at the end of every summer, and receive very good pay.

Passing Dublin Bay, Wicklow and the Saltees, we were proceeding gaily on our way when suddenly we saw what was supposed to be a dismasted vessel, the "Porcupine's" course was immediately changed, so as to render any required assistance, and the men clustered forward prepared to make every exertion on behalf of the unfortunates. On approaching more closely, we found the strange apparition to be a peculiar kind of steamer, with no masts and a long black roof between the two funnels, giving her exactly the appearance of a vessel escaped with difficulty from severe weather. Shortly afterwards we saw Youghal in the distance, and came closely past Capel Rock, an extremely beautiful spot, the coloring being very pretty; its form is rugged and oval, and it is about one hundred and fifty feet in height, and covered with grass and heather on the summit. The sides are formed of red sandstone, intersected with gray veins, on the top is a small tower and numbers of lichens. In the evening we anchored at Ballycottin, having run 230 miles since leaving Belfast. We could not have found a finer spe-

cimen of Irish scenery: the long straggling row of cottages, the white coast-guard houses, the church and old trees, all united to contribute to the calm beauty of the scene. The sea reposed without a ripple beneath the pale moonlight, and we saw a shoal of some kind of fry jumping out of the water and spreading a silver shower over the surface. Leaving at the early hour of four next morning, we shortly arrived at Queenstown, the beauty of the entrance and general appearance of what is by some considered the second harbour in the world was greatly admired. The small fishing boats, with their red sails, floated lazily before the faint morning breeze, through the thin haze which preceded the glare of noon day. Leaving behind Spike Island and H. M. S. "Scorpion," we came to our moorings opposite Haulbowline, the government depot for stores; here we got the requisite amount of coal put on board, and our staff received an addition in P. Herbert Carpenter, Esq., who had been selected to undertake the superintendence of the Physical Department during the third part of the expedition, and accompanied us to the Bay of Biscay, as a kind of preliminary trial in conducting analyses under difficulties. We made our departure at 7-30 P. M., and found ourselves steaming out to the deep sea. The first dredging was in 75 fathoms, but no results of much interest were obtained from it; however, by using a tow net we caught some salpæ; as they are very difficult to preserve the greater number were tossed overboard. The steamer now began to roll over the long Atlantic swells, and I naturally felt considerable anxiety about the stability of the contents of the experiment room, fortunately everything remained in its place. When busily occupied our hours were rather long, generally speaking our first sounding was made at four o'clock in the morning, the water bottle and two thermometers being sent down at the same time. Occasionally a day was devoted to the determination of depths, temperatures, and water analyses alone, and then my work only ceased when all the available tubes were filled with gases. We were faithfully accompanied during the rest of the voyage by a flock of Mother Carey's chickens, and indeed their attentions grew rather annoying, for they seemed to rejoice in bad weather, and skim over

the wave crests as if they enjoyed the increasing storm. We also met a shoal of porpoises; one of the party made vigorous but unsuccessful attempts to gaff one, by means of a large fishing hook attached to the end of an iron rod; it is unnecessary to say that the porpoise departed uninjured, and the only result was the loss of the hook.

Whenever the dredge was emptied, Dr. Thomson and his two assistants examined the contents, large shells or animals being of course easily taken out. In order to separate the smaller creatures, the sand or ooze was placed in the coarsest of a series of sieves, which fit inside each other, and become gradually finer in the mesh. The whole set are thoroughly well washed, and the contents inspected from the largest down. Valuable specimens were at once placed in alcohol or some suitable liquid.

Proceeding on our course we at last found ourselves in Lat. 47° $38'$, Long. 12° $4'$, a depth of 2435 fathoms. Every one on board was gratified at the result of our sounding, but the heavy sea which prevailed was not at all conducive to dredging. Having only four miles of dredge rope on board, we naturally felt considerable anxiety before venturing to send it down in such a great depth, but towards evening the sea became less agitated, and finally the dredge disappeared over the bow. At a short distance from the dredge, a weight was attached to the rope, and two more at about equal intervals above the first; the effect produced was this:—in case of the rope descending vertically the probability was that the iron frame of the dredge would sink directly into the mud, and not detach any of the bottom when dragged along it. The addition of the weights caused the rope to descend in a curve, and consequently the dredge was deposited in the most effective position on the surface of the sea bottom. The dredge was sent down at 5-55 P. M., on July 23rd; we commenced hauling up at 8-50 P. M., got it on board at 1 A. M., and found 200 cwt. of Atlantic ooze in the bag; we had about 2000 fathoms of line out; and thus the first attempt to explore these great depths was successful. The ooze was somewhat the colour of Roman cement when moist, and of a glairy consistency, becoming nearly white on drying, and containing several form of

marine Invertebrata. Incontestable proof was thus afforded of the possibility of animals existing under such pressure and under such conditions.

We remained three days about the same station, and then steamed slowly towards Queenstown, dredging and making temperature observations up the Atlantic slope. On the following day we experienced rather bad weather, and on one occasion nearly lost our sounding line, Hydra and thermometers. As we approached, the dredge came up fuller at every haul, and the contents were more varied. I must refer the reader for a complete account of the zoological results to the Report contained in the Transactions of the Royal Society. The "Porcupine" brought us home in safety, and we have every reason to congratulate ourselves on the facts we had established;—

- (1) The existence of animal life at a depth of 2435 fathoms.
- (2) The gradual formation of a vast chalk bed at the bottom of the Atlantic.
- (3) The presence of organic matter throughout the ocean.
- (4) The amount and relative proportions of the gases contained in Sea Water.
- (5) The variation in the nature of the saline constituents of the ocean with the depth.
- (6) The results of the thermometric observations were of the greatest interest, indicating the presence of warm and cold currents at various depths below the surface.

During the remainder of the summer of 1869, Drs. Thomson and Carpenter proceeded in a northerly direction, pursuing the course adopted by the "Lightning;" and in the summer of 1870, were examining the Physical and Zoological characteristics of the Mediterranean.

This fragment of scientific history shows us that theories, however ingenious, should be cautiously adopted, until strict investigation confirms or disproves them.

THE BEAR AND HIS BOOK.

CHAPTER THE FIRST.

PARIS.

It was Christmas night. Ah! but do not suppose that it was such a one as you have often spent in your English home; bright with all the traditional and active life and pleasures of that glorious time. It was not a counterpart of those genial hours when all care is thrown to the winds, and old and young vie with each other in merry-making, when the romping and fun of blind man's buff are but the preludes to a blazing snapdragon, and a grand set of Roger de Coverley after it. No, in my case it was widely different; instead of a large room, lit by holly-shrouded gazeliers, and gaily decorated with boughs and berries, with here and there a stray (?) bunch of mistletoe peeping out of the most unexpected corners, and quiet-ty winking to its big brother over the door; instead of a great crackling fire roaring up the chimney and threatening to consume the rash mortal whose steps roved too near it, and generally voted "jolly nuisance" by the heated dancers, who are careering up and down, round the room, once across, and back again, with many a "Oh dear! what a punch," "There goes my dress,"—"I never yet danced with any—," "Look out, in front,"—"I'm coming down, help somebody!" instead of a quiet chat in some convenient window recess, or behind an obliging couple, who, from being over-anxious to be seen and admired, form an excellent screen for the hoarse ambitious, instead of the sounds of some loved voice singing your favorite song, "that one, you know, that you are so fond of," whether it be "Not for Joseph," or "You and I;" instead of the supper when such an awful amount of flirtation and fun goes on as quite to horrify you very youthful Reverend, whose gooseberry eyes are piously raised and cast down alternately, as if he were not quite

sure whether he ought simply to ignore these worldly deeds or call down vengeance from on high upon their perpetrators. Take care, though, my dear Sir, for there's Dick Westfield who is making up to you, bent on mischief, and who knows whether within the next quarter of an hour you will not, instigated by him and champagne stand up to propose "The Ladies, bless 'em!" at the same time leering horribly at the ancient maiden next you, and scattering sheep's-eyes in a manner more liberal than welcome.

Instead of ———

But what on earth is the use of my calling up all those recollections? *My* room is not vast, indeed it rather tends to the "crib," being about ten feet square or thereabouts, and the available space considerably diminished by a French bedstead, (O Nature, why didst thou make me tall!) wherein I nightly suffer agony comparable only to that endured by the unfortunate Cardinal de la Baluze in his iron cage. He, it is said, could neither lie, sit, nor stand in his airy dwelling, but I am no whit better off, for I can't stretch myself out, or else the ancient framework emits dismal groans, as if about to part with life, and if I try to sit up, I rasp the back of my neck against the edge of the bedstead. I dare not turn too far either way, because on the one side I come into violent collision with the wall, whilst on the other the extremely sharp angle of the mantel-piece constantly threatens a too-severe test of the hardness of my head. One night, driven nearly mad by restlessness, I did try to stand up, but, on account of the ceiling not being at a very great height, I only succeeded in bringing myself down again along with a heavy shower of plaster, mixed with cobwebs and spiders of divers varieties, none of them pleasant. So I have either to go to sleep, if I can, trussed up like a fowl, or rolled on myself like those queer white fishes you see in shops, that have got their tails stuck through their gills.

Let me see, though, I'm afraid I have been making a digression, and what's worse, that I have forgotten what I was saying. Oh, I have it—I was telling you of my bed-stead, aggravating in so many ways and so hated by me in former days—but peace be with its ashes (it was burnt along with the house some weeks ago!

Besides this nightmare of mine, there was a huge chest of drawers in the corner near the window, whereon stood a tin basin, not much bigger than a soldier's, and they, goodness knows, are small enough, with a strangely shaped jug for a companion, on whose scratched side were represented the loves of some Chinese adventurers—the lady squinted, and the gallant looked like an Eastern house-breaker and Sheriff's-officer combined—and a most wonderful landscape, consisting of a pair of Grecian columns, a mountain, a river flowing below numberless bridges that led to nowhere, and a young woman with a lap-dog and a banjo. It was on this piece of furniture that I had to perform my "ebullitions" as that dear old Ned used to say, and, accustomed as I was to make-shifts, I should not have objected, had it not been for the trifling inconvenience of the water flowing in a continuous dribble right into the interior of the drawers, and considerably spoiling the stiffness of my collars and the whiteness of my handkerchiefs. Then there was a rickety table, acting as vis-a-vis to this tearful lavatory, and above the table a peculiarly combined set of bookshelves. I do not know whether it was from inexperience or from what occult cause, but I could never place a book on any of these four boards—"ces planches de malheur," as the concierge used to call them, without upsetting every one of the others, and bringing down the various articles with a crash which, I have reason to think, was peculiarly grateful to my next neighbour, a man of unamiable temperament, with whom I had already disagreed more than once. The remaining furniture of the room consisted of a couple of arm-chairs with each a satellite. Variety has been said to be the soul of beauty; but I confess that though I enjoy a considerable reputation for taste and the appreciation of the beautiful, I could never reconcile the appearance of that quartett of seats to the rule; after long and unsuccessful attempts, I was forced to admit my precious chairs to be an exception, and therefore entitled to be ugly. They certainly took full advantage of this permission, and were by no means "fair to look upon." If you add to this a battered brass candlestick and a time piece with a tendency to wander from the correct time—my "little Ben" I was wont to call it, on account of its being the very

antipodes of the famous Londoner—you have the complete inventory of the furniture of my room in "*la baraque grise*" as the house was called in the neighbourhood. Stay, I forgot to mention the most splendid ornament, in fact the only one, viz: a very handsome mirror, framed in the fashion beloved of our ancestors, and so contrived as to present either an elongated or a broadened reflection of your face. Any one with a fancy for grimaces would have found a perfect mine of novel combinations by sitting before that mirror for half an hour.

Well, it was within that carefully described room, before a good coal fire—the only trace of English comfort—that I, Francis Charles Stanley, gentleman at large, was sitting in a dismal attitude on the night of the 25th December, 18—. I was meditating, as solemnly as any man ever meditated just before he will acknowledge that he is sea-sick—you must know that I hold that true meditation and philosophical reflection can be brought on only by the approaches of the aforesaid dread malady—and thinking and wondering at various things, till my cogitations suddenly resolved themselves into this: What on earth am I doing here in Paris?

And I positively could not answer.

So I fell into another train of thought, and traced the course of my erratic wanderings of the last six months back to its origin, but could not find any sane reason for the act which had thus reduced me to the misery of spending Christmas in a "*meubl *" of Paris, instead of enjoying it to the full either at Wortley Hall, in the bosom of my family, or at Sir Andrew's in the north, where, now that I think of it, that ass of a Macdonald will be making up to—"By George, I wish I had him here!" and thump! goes the poker on the unoffending coals that burst out into a perfect roar of pain and protestation as the flame curls up around them.

Then since, in my idiocy, I have seen fit to coop myself up in this vile hole, instead of revelling in happiness over the water, have I not repaired to some of my Parisian friends, in whose houses high jinks are going on? And why of all places, have I chosen "*la baraque*" as a residence?

Well, these, at least, are answerable questions. I don't go to

my Parisian friends to-night because it is Christmas night, and I shall either keep it in the true English style or not keep it at all. I want more than the magic tree, with its peculiar crop of oranges and wax tapers, dolls and biscuits, nuts and jacks-in-the-box; more than the glaringly lighted ball-rooms, rich with exotic ferns and flowers, the conservatories with their fountains running with perfumes, and lanterns shining out between the glossy leaves. I want more, or rather I want less. I could and would dispense with all your wondrous plants, if your rooms were but garnished with the sombre holly and its glorious berries, with the fragrant pine branches, with the aromatic laurel, and the dear old mistletoe. That's what I want, and then English girls and English boys, all full of happiness and glee; genuine old British fathers, their capacious backs turned to the fire and their coat-tails tucked under their arms, smiling down upon some blue-eyed, flaxen-haired little fairy, that entreats them to "come and play with us," good, true and loved British mothers, brimful of delight as they watch their children, whether of five or twenty years, enjoying the happy hours, and exchanging smiles and loving looks. You see that I am moderate, *very*, and don't care for any of your great, crowded balls, such as are going on to-night in more fashionable quarters than the one I dwell in.

And as to why I have put up in this place, the reason is to be found in the fact that five years ago, I lived here for three months, with that prince of good fellows Edward Gray—Ned, as I call him. Then it was summer, and the bright sunshine made the room look a thousandfold more bright and beautiful; creeping plants covered the balcony and hung in luxuriant tendrils over the window, their brilliant flowers shedding a sweet perfume around; then it was pleasant, if we felt inclined to be sedentary, to bring out the easy-chairs (another king reigned then in "la baraque") and smoke the fragrant cheroot or Oriental narghile, while the evening breeze brought us the faint sound of bells from some distant church, and the strains of the band in the neighbouring gardens.

So great was our affection for the room then, that Ned and I had agreed that if either should ever come to Paris alone, he would

put up in the old place, for the sake of past times. But it was very different in the cold season, and when a fellow felt rather lonely, and more inclined to be melancholy than otherwise. I did not care to go out anywhere, to any of the numerous public amusements; for one thing, it was what is so well termed "a wild night;" the wind shook the frail casement, as if insisting on its right to come in by the window, since it refrained—very considerably—from coming down the chimney, the snow fell in thick flakes and covered every roof with a pure white layer, and deadened the sound of the few wheels that rolled every half hour or so through the deserted streets. You could not help feeling that the wisest course was to stop at home, if you had not a comfortable close carriage to whisk you to some place of gaiety—now I had *not* this, at least not here, in Paris.

Well, I took up one book, and then another; tried to read poetry, and only succeeded in producing a dismal whine, whenever I came to a more moving passage; I bethought me of writing, but the ink was thick, the pen scratched, and the paper blotted—so I gave that up, and finally resorted to the expedient of the solitary man, viz: I took my pipe, filled it with scrupulous care, lighted it, puffed away, and lost myself in delicious visions of other days—occasionally varying my remembrances by a good bout at castle-building, a process in which I especially delight, the more so that one of my apparently wildest and dearest came true within a few months after the laying of its foundation stone.

Still, that sort of thing could not last for ever, and I was just on the point of tossing up to see whether I should go to bed at once, 8 p. m., or taking my cloak about me, venture forth to some deed of rejoicing, regardless of the fierce storm outside, when the door burst open, and in dashed Ned, his right hand extended and his great voice shouting out "A Merry Christmas to you, Frank, my boy!"

CHAPTER THE SECOND.

NED'S STORY.

Surprise at this unexpected apparition struck me dumb for a moment. Ned was about the last person I should have expected as a visitor—for I knew that he had left England shortly after me, and had gone to Norway for the summer, and ought by this time to have been either in Rome or Florence, in accordance with a resolution expressed in one of his last letters to me.

Short, however, was my silence, and with a wild whoop I sprang to my feet, and grasped the friendly hand. In another minute we were deep in the intricacies of a "war-dance," borrowed from the Red-Skins of America on the one hand, and the Scottish Highlanders on the other. After figuring to each other in this Terpsichorean manner for some eight or ten minutes, we each fell back into one of the ugly arm-chairs, fairly exhausted by our shouts and springs. No sooner was our breath back than a flood of questions burst forth, each anxious to know how the other happened to be where he was. Calm was eventually restored, and I then briefly informed Ned of my adventures in Spain and Northern Africa, my stay in Corsica, and my queer zig-zag voyage through Switzerland and France, concluding with a strong expression of my delight at seeing him appear at the very moment when I was about to commit myself to the howling tempest outside.

"But you," said I, after concluding my tale, "how do you happen to come to Paris at such a time, when I understood you to be trying your execrable Italian in some Florentine palazzo?"

"By a series of circumstances over which I had no control, including especially a railway train that made me lose my dinner on the way, on account of its starting before I had been able to make out the names of those confounded French dishes, and therefore able to taste the vile compounds. But it's quite a story, and I had rather not tell it before having done honour to the well-known hospitality of my friend Frank Stanley."

"Too early for supper by two hours."

"True for you, my dear fellow, but high time for me who have

been travelling all day. I am literally furnishing, and your concierge drew back in affright as he beheld the red glare of my eyes flash upon him in the stairs. So out with your victuals, and as Don Juan, that disreputable friend of yours, truly says—

“Finch’ han dal vino,
Caldo a la testa,
Una gran festa
Fa preparar!”

In a few minutes, with the help of the concierge, a capital supper was laid out on the rickety table, which was propped up for the occasion by a volume of Horace and a copy of the Pilgrim’s Progress, which had found its way, I know not how, into my small library. True, it had never been opened, and, Ned said, was never likely to be. However, the two agreed very well together, and performed their part to admiration. As soon as my friend’s voracious appetite was somewhat satisfied, we pushed away the remains of the “gran festa” and I set about compounding a vast bowl of punch, for the purpose of keeping myself awake during Ned’s sermon, on hearing which he threatened not to say a word and drink punch all night, which greatly frightened me, for I wanted to have most of the precious beverage. Pipes were filled and lit, the smoke rose to the ceiling in graceful curls, and the aromatic odour of the tobacco mingled pleasantly with the richly-scented vapours of the bowl; we drew our chairs closer to the fire, gazed at each other, solemnly puffing away, for about ten minutes, at the end of which time Ned opened his mouth quite wide, and in words of wisdom thus related his tale:—

“You remember perhaps, Frank, calling with me at Hazel Lodge the week before you left for your continental tour, and that we there met that gruff old Marston and his amiable wife? Well, I had long wished to obtain an introduction to this worthy couple, not, as you may well believe, for the sake of playing back-gammon with the old gentleman, and being sworn at by him whether I lost or won, but because I had a vague idea that they were blessed with a very pretty daughter, in fact, I had met her some months previously at the Westfield’s pic-nic. Though they live close to our

place, I had been unsuccessful in every attempt to penetrate into this garden of Eden, for, as you know, Marston is not only one of the most churlish and inhospitable bears that tread this earth, but also frightfully jealous of any man under forty, whether handsome or ugly.

In vain did my sisters, at my instigation, formally invite the Marston household to dinner on three separate occasions, the old wretch—forgive my calling him such opprobrious names—persistently declined, and even refused to allow his daughter to visit at the Westfields', who hitherto had, along with your people, been privileged in this respect. You can fancy how nettled Dick was at this. He swore vengeance on Marston, and offered to help and further me in every possible way. We accordingly set our brains to work to find out a way of entering the "Castle of Gloom," as the place was nick-named, but after long and deep cogitations we were forced to give it up for a bad job, and agreed to trust to kind Providence for a way to help us out of our dilemma. This was sooner found than we expected, for as Dick and I were riding home one day, after spending the afternoon at your place, we came up with the Marston carriage, with only Mrs. Marston and Julia in it. We bowed and were going to pass on, much to my disgust, when Mrs. Marston put out her hand to Dick, who nothing loath immediately entered into conversation and was soon pacified by her explanations. Indeed, everyone had felt sure, that the rupture between the two families was all Marston's doing, and that his wife and daughter had no share in it. To be brief, we rode on by the side of the carriage as far as the entrance to the grounds, and parted after having concocted a nice little scheme for meeting again in the same way. It was quite astonishing how very fond Dick and I got of riding along that road, though heretofore, we had always professed the utmost contempt for beaten tracks, and had been wont to strike through the woods and across the meadows when out for even an hour or two. It was singular, too, that the Marston carriage should so frequently pass along that way just as we were about to take the turn to the left, which we never did, though occasionally we made a prolonged stay at the meeting of the two roads, but that

was probably because we could not agree as to which was the right one to follow.

Well, we had great luck, for Mrs. Marston took quite a fancy to me, and looked rather favourably upon my attentions to Julia, and as for the father, he was busy with some of his queer pursuits, and seldom left his study, and in such cases only wandered moodily round his garden. So long as his wife and child did not pay or receive visits, he was quite satisfied, and otherwise left them full liberty to do what they pleased and go where they liked. However, we soon began to wish we might penetrate within the precincts of the Hall, as the conversations on the road were for the most part broken and interrupted, and besides, you know, however disposed Mrs. Marston might be to favour Julia and me, yet we could never have a right good talk "all to ourselves." Judge then of my unbounded joy when, one morning, Dick came rattling up to the door in his dog-cart, and informed me that "the old screw" was gone to London, and would not be back till late the next day. He proposed we should drive over in the course of the day and call on the ladies, a plan which met with my sincere approval. So, soon after luncheon, off we went, bowling along the smooth road at the rate of eleven miles an hour, and full of anticipations of fun and happiness. The gate-keeper smiled visibly when she saw us draw up before the entrance, and threw open the wide gate with a "You are right welcome, gentlemen." On we sped, up the long avenue, bordered by grand old beech-trees, over the river, scarcely glancing at the lovely dell full of verdure and life, and pulled up at the door of the Hall. Down jumped Dick and giving the bell a hearty pull, inquired of the footman whether "the ladies" were at home. What was my horror on hearing a distinct and well-articulated "No, Sir, Mrs. Marston and Miss Julia drove out shortly after one, and will not be home till tomorrow." "Not home till tomorrow! They have not accompanied Mr. Marston to London, have they?"

At this point my attention was diverted by some one pulling my sleeve, and looking round I saw a little girl, whom I knew to be one of Julia's attendants, holding out a note to me. In a second I had torn it open, devoured the contents and called to Dick,

“Well, never mind, just jump in and let us be off. “Be good enough,” I added, turning to the footman, “to mention to Mrs. Marston that we called with a message from the rector.”

On hearing this Dick stared very hard at me for a moment, but seizing the reins, drove down the avenue; then turning, “What’s up?” said he. In reply I handed him the note I had been given, and which contained these few words, traced by my darling’s hand:—

‘Tuesday Morning.

‘DEAR MR. GRAY,

‘Mamma desires me to say that we are going up to the Bower, to spend the time till papa comes home from London. Perhaps you would not mind coming up, as we should be delighted to see you and Mr. Westfield to tea.

‘With kind love from Mamma,

‘I remain,

‘Yours sincerely,

‘JULIA MARSTON.’

“By George! how jolly. Why it will be twice the fun up at the Bower, and we won’t be troubled by those vile male servants, whom I detest most heartily. But what’s the message from the rector?”

“Oh that’s easily settled; anything will do. I only wanted a decent pretext for that footman; come, make that mare of yours step out, and let’s fly to the Bower.”

The place to which they were now directing themselves, was a charming little cottage orné, built by Mr. Marston’s father, up in the hills, and to which Mrs. Marston generally repaired whenever her husband left for town. It was pleasantly situated on a slope above the road; a broad terraced lawn spread out before it, and a large garden extended to the wall, which was some seven or eight feet above the road itself. The entrance wound round the house, and you had to go almost completely round it before reaching the front door, which was all covered with creeping plants in full bloom. It derived its name from the mass of trees and shrubs which surrounded it on all sides, and rendered it a most agreeable residence during the warm months of summer.

The house itself was small, but exceedingly comfortable, and to the stray visitors, whom Mr. Marston was occasionally obliged to receive, far more agreeable than the grander but gloomier Hall. There were no stables,—the Marston equipage putting up at the inn of the small village in the valley below,—but there was a large poultry-yard, and a well-stocked pigeon house, whose feathered inhabitants were great favorites of Miss Marston's. When in England, I used frequently to visit at the Bower, for Mr. Marston and my father being old friends, I was the only young man allowed to approach the family. So I knew the place well, and loved it, to boot, and could quite sympathise with Ned's rapturous admiration. Let me not forget to mention the fact, that like most cottages, the Bower possessed two entrances, of which, in this case, the back one was far the more commodious, as you could enter directly by it, instead of having to go round to the garden-front. And now that I have given you some idea of the spot to which Ned,—who has just taken a long pull at his tankard of punch, and re-lit his pipe,—and his trusty Dick are hastening, I will once more sink back into obscurity and my arm-chair, and leave him to continue his story.

“ Well, we got to the village, and put up the horse and trap at the inn, leaving them in charge of the Marston coachman, in spite of Dick's wish to remain and see his horse groomed—but I could not go up to the Bower alone and I would not wait, so like a good fellow he gave in, and we rapidly accomplished the distance that separated us from our journey's end. We found Mrs. Marston and Julia in the garden, engaged in a croquet tête-à-tête which, after the first civilities had been exchanged, enlarged itself into a quartet. Oh how jolly it was! And afterwards Julia and I had a ramble down the dell, by the side of the streamlet, and such a talk, crikey! and tea, *en famille*, as Dick said, and songs after it, and we sang duets, and trios, to our entire satisfaction, and Julia walked round the garden with me, and gave me such a lovely bouquet of *mignonette* and *forget-me-not*.”

“ I know, all right; pass on to something else; such blissful moments won't bear describing.”

“ You brute; well, we had supper, and we agreed that Dick and

I should spend the night at the inn, and call next morning before the ladies started homewards, as Mrs. Marston did not consider it prudent for us to accompany them in the carriage, the hour of her husband's return being uncertain.

You may fancy how highly disagreeable was the sensation produced among the party at this moment by the sound of the old screw's voice at the back-entrance!

"Away, as fast as you can," cried Mrs. Marston.

Out we both sprang into the front lobby, and into the garden, Dick two lengths ahead, springing over the flower-beds, and lost in the darkness in less time than I take to say it, and I about to follow him, when I discovered that I had forgotten my hat on the hall-table, and rushed back for it, in hopes of escaping scot-free. The door always stood open, I sprang in, seized my property, and turned to fly. Alas, in my headlong course, I came into violent collision with old Marston, who, hearing the steps in the garden, had come round—my impetus was so great that he went down like a shot, and catching his foot in one of the croquet hoops that by some chance had been left standing on the lawn, fell with a horrible clatter and very strong imprecations.

I confess that my discretion overpowered my politeness, for I bolted away as hard as I could by the same road as Dick, with the sound of Marston's voice raised in angry threatening following me down to the garden wall, over which I dropped most awkwardly, spraining my ankle in my fall. I picked myself up as I best could, and called in a low voice for Dick, who did not answer. I limped to the inn, where the trap was already being got ready by Westfield, who had hastened thither at once, and was much grieved and distressed at my accident. There was no time to lose however, and after taking a glass of brandy, to remove the faintness caused by the pain, I was lifted into the dog-cart, liberally tipping the groom, who promised to bring us news of Julia and her mother, as early as possible next day.

What a drive that was! Though suffering a good deal from my sprain, I could not help laughing heartily at the summary way in which I had felled Mr. Marston, which Dick declared was an

advantage he envied me; but our merriment was soon checked by the thought of the consequences of our visit to his wife and daughter, upon whom his wrath would naturally fall. In fact we were highly uncomfortable the whole of the way home, and with this was mixed a considerable share of annoyance at our happy party being disturbed in so sudden a way. It was only some time after,—for the groom was unable to bring us the promised information for more than a week,—that we heard that Mr. Marston had managed to transact his business in London in a few hours, and had returned to the Hall the same day, making his way thereafter to the Bower. His anger was fearful, and for some weeks he would never allow his wife or daughter to drive out of the park, but insisted on their confining themselves to the garden when they wished to breathe the air. He soon found out, of course, who were the two “scoundrels,” as he called us, who had dared to penetrate as far as the Hall and into the very Bower, and wrote my mother a most furious letter, stating that if he ever caught me near the bounds of Marston Hall, he would have me flogged by his keepers. Naturally we laughed at these threats, but the evil was done, and I had now no chance of seeing Julia. To make matters worse, the very servants were forbidden to hold any intercourse with ours or the Westfields’ on pain of immediate dismissal, and as he refused to listen to the entreaties of your father, who called on him as soon as he heard of the affair, I took the advice of my friends and started for a tour through Sweden and Norway. My intention was, as you know, to spend the months of August and September there, and then travel south, and winter at Rome or Florence; indeed, I had already proceeded as far as Nice, when, two days ago, I received a letter which caused me to pack up in very great haste, and speed to Paris, for the purpose of crossing over to England as soon as I could get my business here settled. I knew you were somewhere in the provinces, and almost expected to see you here. I got driven hither after leaving my luggage at the hotel, saw a light shining through the chinks of the window, learnt from the *concierge* that you had been settled here for three days and were quite alone, so up I came, and here we are!

“ So far good ; but what was there in that letter to make you return so speedily to England. No bad news ? ”

“ Neither good, nor yet bad. The fact is my mother writes me that Marston, thanks to your father’s good offices, has so far relented as to receive the Westfield family into favour again, and to have even made some advances to our people ; but nevertheless, he cannot bring himself to forgive me that fall—the truth is he got his nose cut and one of his eyes blacked, no wonder he was mad—and still refuses to raise the interdict against me. Besides this, he brought home with him from London a German philosopher, a beer-swilling, sausage-swallowing machine, made up of dreams and ugliness, a scrubby moustache and a long pipe, Herman Sauerkraut by name. This fellow, who is supposed to be deeply versed in science and literature, has quite captivated old Marston, and has the inexpressible impudence to aspire to Julia’s hand ! Fancy that German boor, that Swabian sniveller, that blear-eyed idiot, that disgusting specimen of degraded humanity, that—”

“ Hold ! for goodness’ sake, hold ! can’t a fellow be a German without being absolutely so bad as you make out this one to be ? Why, there must be some good in him, somehow or another.”

“ Not one bit, to my mind. Of course he’ll spout any amount of Latin, Greek and Hebrew, on the slightest provocation, and will discourse to any extent on the beauty of such and such a system of philosophy, whether the Stoic or the Epicurean, matters little to him, provided he can chatter away, like a nasty magpie that he is.”

“ My dear Ned, you are positively ridiculous in your vehement hatred of the poor, unoffending German ; I assure you that I, who have had frequent intercourse with many such as Herr Sauerkraut, have not found them so wholly devoid of amiability and grace as you try to make out your rival to be. On the contrary, I confess to having quite a partiality for Germans, and German philosophers especially. Though their manners may seem to you strange and ridiculous, to me they are full of interest, from the simplicity of character they betray ; their clear, calm look scarcely merits, indeed does not deserve, to be called bleariness, their modesty and quaintness in dress entitles them to our respect, for it shows a noble dis-

regard of the vanities of this world, and their features, which you characterise as boorish, I think full of intelligence and expression. You should be more moderate, I assure you, and display your in-born nobleness of nature by recognising the qualities of a rival, instead of heaping upon him such a host of extravagant and injurious epithets."

As I concluded this little admonition, which I considered exceedingly terse and effective, I indulged in a copious draught of the now fast-cooling punch, and puffed out a cloud of smoke in the gravest possible manner. Ned looked at me for a moment with eyes and mouth wide open, as though wondering what was going to come next. Gradually his features relaxed, and with a shrug of the shoulders he continued:—

"Very well, then; it is agreed that Herr Hermann is a thoroughly polished and well-bred gentleman, and that my wrath is an insane display of jealousy. We will allow that he is perfectly justified in trying to cut me out—"

"Of course he is; of course."

"In Julia's affections, and that my expressions of disgust are exaggerated and uncalled-for."

"Quite; perfectly ridiculous, indeed."

"And that a German, and Herr Sauerkraut (confound him!) in particular, is an amiable and loveable man?"

"Yes."

"Very well. Now to go on with my tale. Mr. Marston, then, brought back with him this philosopher (unwashed sinner that he is!"

"Ned!"

"Excuse me, I forgot;—brought back this German gentleman to Marston Hall, where he was treated with the greatest deference, and where he engaged with its master in literary pursuits. The two are book-mad, and my business in Paris is to secure a rare edition of Vergil that Mr. Marston has set his heart on, and has long hunted for. He once offered to grant any boon to the man who should bring him information of the whereabouts of this unique

work, and thanks to my old college-tutor I have secured it, and mean to use it to some purpose."

"I can guess; but pardon my interruption and go on with what you were saying."

"Things went on thus at the Hall for some time; Sauerkraut was closeted for hours with his patron, and thereafter strove to ingratiate himself with Julia. I am glad, very glad to say he did not succeed, and that when his importunities became unbearable, and Julia had to complain to her father for protection from them, he was politely dismissed by Mr. Marston. I rejoice in this."

"You rejoice in it. Oh Ned, have you no more forbearance than to exult over a fallen enemy? It is not right, it is not christian."

"Shut up your nonsense, and be sensible for one moment. When I say he dismissed him, I do not mean that he actually turned him away, but he politely hinted to him that a voyage north might benefit his health, which had somewhat suffered at the Hall; and as Sauerkraut, who had met Sir Andrew Ross in London, had contrived to get an invitation from him, he made his arrangements to visit 'vile Schottland' as he called it."

"But—"

"Permit me; you will speak after. Dick saw him to the station, and with the mischievous spirit which animates him, he got the Herr to believe that a young lady of the neighbourhood—whose name, of course, Dick could not reveal—was bent on obtaining a lock of his hair (nasty bristly mane, he has got, sandy coloured, with a tendency to drink) and that she had appointed Dick her ambassador. This greatly tickled the philosopher, who insisted on having a description of the young lady before he would consent to make the gift. Our friend's imagination, never at a loss, soon pictured to the German a glorious Marguerite, and he allowed Dick to sever, in sight of all the passengers, a huge tuft of his hair, protruding his ugly head out of the carriage window for the purpose. In short, he started overflowing with pride at the numerous conquests he was making wherever, a Teutonic Apollo, he appeared, and reached Sir Andrew's place in the most amiable dispositions.

There again, it seems, from letters which your people have received, and which they communicated to me, he has met with unbounded success—”

“ Eh ! what ? ”

“ Patience for one moment. So irresistible indeed, has he turned out, that a certain Hugh McDonald—”

“ McDonald ? I say—”

“ Do keep quiet, and let a fellow speak for once. That a certain Hugh McDonald, who was doing his best to win the good graces of Miss Ross—”

“ Not Mary ? ”

“ Yes, Mary Ross,—has given up the attempt in despair at Herr Sauerkraut’s rapid advance in her estimation.”

“ The unmitigated rascal ! The low-born fool ! The loutish, drunken idiot ! The presumptuous fellow ! Making up to Mary ? Why, is he mad ? is he altogether devoid of his senses, at least of the small share Nature dropped into his dirty, thick head by mistake ! The dolt ! The—”

“ Hold ! for goodness’ sake, hold ! Can’t a fellow be a German without—”

“ Don’t speak to me, Sir. He is an irrational donkey ! A concentrated essence of stupidity ! A compendium of ignorance and vanity, of conceit and impertinence ! A very model of a boorish coxcomb ! An inflated wind-bag ! A mass of—”

“ My dear Frank, you are perfectly and ‘ positively ridiculous in your vehement hatred of the poor, unoffending German.’ Remember that you ‘ who have had frequent intercourse with many such as Herr Sauerkraut—’

“ A brazen-faced puppy, Sir ! ”

“ Have not found them so wholly devoid of amiability and grace, as I try to make out my rival to be—”

“ An ass ! a red-faced baboon ! Hate the fellow ! ”

“ ‘ On the contrary, I confess to quite a partiality for Germans, and German philosophers especially.’ ”

“ Don’t say another word of that ill-mannered, brutal fellow, that he is ! ”

“ You forget, my dear Frank, that ‘ their manners are full of interest, from the simplicity of character they betray’—”

“ A fish-eye’d lobster ! a German crab ! a—”

“ Now really, this is too much ; ‘ their clear, calm look does not deserve to be called’—”

“ Oh that’s all very well ; but he is a fool, a nasty, ragged im postor !”

“ Not at all. His ‘ modesty and quaintness in dress’—”

“ Modesty and quaintness be hanged !”

“ Come, Frank, ‘ be more moderate’ and let the ‘ inborn nobleness of your nature’—”

“ Don’t drive me mad, please ! I feel I shall do some mischief. The impudent, sneaking, backsliding, greasy wretch !”

“ ‘ Thoroughly polished and well-bred gentleman,’ you mean ? Why my dear fellow, your ‘ expressions of disgust are exaggerated and uncalled for’—”

“ Uncalled for ! Did you not tell me yourself that this unwashed, uncombed son of a Deutsch frau dared to aspire to Mary’s love ? By Jupiter, I can scarce credit it ! It is preposterous ! The fat hypocrite ! Would I could kick him into the middle of next week ? Would I could have him for one quarter of an hour, and if I did not make him repent—”

“ Do any thing you like to him, when you get him ; but meanwhile don’t waste good punch by knocking down your tumbler, and spilling half the bowlful.”

“ True, true ; you are right. I will be calm and composed. The gigantic donkey ! Barber’s son, that he is ! The pedlar ! The wandering tinker !”

“ Frank !”

“ Well, well, I am done. Go on. Tell us all about it.” Do you really mean to say he has any chance up yonder.”

“ To tell you the exact truth, Frank, I can’t say that I am positive either way. Mary is very kind and attentive to him.”

“ Just like her, the darling ; she is kind to everybody.”

“ Well, it may be mere kindness, yet he often evidently takes it for more, and he has undoubtedly great talents, sufficient to cap-

tivate such a woman as Mary, and you know that that is saying a great deal, for she is clever, and more than clever."

"True. Then I am done for! Who could have thought it? Beaten by a fat German, with spectacles and dirty clothes. And yet, Ned, I can't believe that my case is altogether hopeless; I am sure she cares for me, or at least, did care once."

"Perhaps so; but you know with most, it is out of sight, out of mind."

"But not with her; oh no, not with her. I am sure she has not forgotten me. Why, see, it is only six months since we parted, and then, though I had never dared to say much to her—but of course, as you say, who knows the secrets of a woman's heart?"

"No one but woman herself, I dare say; but cheer up, my dear fellow; what you must do is this: take the first train to London with me in the morning, call on your people and on mine, and if you can spare the time, on Marston to say a good word for me, and then speed north; see how the land lies, and either speak out your mind, if you see a chance of being accepted, or if Sauerkraut or McDonald have triumphed, why then, go on your long-projected tour round the world——"

"And leave her as I once already left her. Without a single ray of hope; nay, worse, with the conviction that she loves another. Look here, Ned, if I meet Sauerkraut after such an affair, I won't answer for the consequences."

"No, but I will, Frank; you will do him no harm. I tell you, you will go up to him and sincerely congratulate him—not, I know, without pain and suffering, that could not be, after such a shock as that would be to you,—but yet honestly and truly, because, Frank, you love her."

"I must sing to the tune of 'Never say die,' I suppose?"

"Ay, Frank; 'Nil desperandum, Teucro duce, et auspice Teucro.'"

"If you quote Horace, I reply

'Dulce ridentem Lalagen amabo
Dulce loquentem;'

But talk not of me. What are you going to do?"

“Secure that famous Vergil, my key to Marston Hall, under Providence, and away home. The difficulty will be getting speech of the old father. But I trust to you for that.”

“To me?”

“To you; and I will tell you how. You are about the only fellow Mr. Marston sees with pleasure; you are the only one privileged to call at the Hall and at the Bower whenever you please. So you must, if you can spare the time——”

“With pleasure, Ned, to help you. I am sure you’ll pay me back in kind.”

“No doubt of it, my dear fellow, and thanks for your kind acquiescence to my plans. You will call on Mr. Marston (my heart softens towards him, as I picture him a father-in-law; with a slight occasional rub he would do very well,) and introduce the subject of books and rare editions. He’ll swallow the bait in a minute, and is certain to talk about his Vergil. Then will be the moment for action. With a half puzzled look you earnestly inquire particulars of the treasure, you ask to have it described, you strike your forehead and say, ‘Why, it is very singular, but a friend of mine, sir, possesses what seems to me an exact facsimile of this work; indeed I should fancy it the identical copy you are in search of; but I fear he will not care to part with it; I know he was at great pains to procure it—which he eventually did, at Paris—and sets a high value on it.’ He is sure to ask you the name, you hesitate, would rather not, understand there is some unpleasantness in the matter, that your friend and he are not on good terms, through some misfortune,—in fact pique his curiosity, his mania, and finally blurt out my name. He will look glum, I know, and cease the conversation, but I’ll bet you that within three days of your visit I receive an invitation to Marston Hall!”

“Very likely you will; I’ll be your best man in that case, I fancy?”

“You are going on quick enough, Frank, but are you sure you won’t be married as soon as I? Who knows whether your journey north may not prove the most fortunate of any you have yet undertaken?”

“No, it will not. That I am certain of. I do not know why, but I feel that my case is quite hopeless. Why, that Herr has got all the luck to himself; there at Christmas time and with McDonald resigned! Besides, in such matters, I am a very coward. There, you need not tell it, but I plotted for a whole day to ask her for a lock of her hair, begged she would grant me a favour before I named it, she granted it, and yet I could not muster the pluck to get out the words and actually left for England that same night, without daring to make my request.”

“Excuse me, Frank, but you acted like a great fool in that matter.”

“No doubt I did. But if I could not do such a simple thing, how shall I ever— Oh, it is of no use talking about it. That German has flattened me out.”

“Not one bit of it. Come, is it agreed? We start by first train to-morrow and as soon as things are set going at Marston, you go north. Look here, I will accompany you, if you like, or write, or do anything you may think useful.”

“Thanks, dear Ned, thanks, and once again thanks. But on this I am resolved: I will travel down alone; if I succeed you get a telegram from me the same day (or night, I don't know which it will be,) and if I fail, you and yours do not see me for two years. Do not say a word against this, but consider my resolutions as unchangeable, and meanwhile dispose of me as you think most fit.”

Thus ended our talk and Ned's story. The punch, the pipes, were done. The debris of the supper were removed; we contrived a second bed by means of the chairs and rugs, blankets and what not, whereon I took my rest, while Ned, exhausted by his long journey, slept on the “nightmare.” Next day, we were on our road to England, and we reached Wortley Hall, tired but inexpressibly glad to see the old, familiar faces beaming with joy and surprise at my unexpected return.

CHAPTER THE THIRD.

MARSTON HALL.

My first care, after I had got over the unavoidable ceremony calls, was to betake myself to Marston Hall, whose inhabitants were sevenfold more interesting to me since Ned's confession.

So I rode over one fine afternoon, when the bright sunshine had softened the frost-bound earth, and the clear air breathed life to my frame,—and found the whole circle assembled in the bow window of the vast dining-room. This recess was a peculiar favourite of mine; it was so cozy and comfortable,—just large enough to admit of a quartett, which could be separated from the rest of the room by drawing the heavy, sombre curtains. Mr. Marston was highly gratified at my early appearance at the Hall, and testified it in his own way; Mrs. Marston and the lovely Julia were, I dare say, equally pleased, though I could not help fancying that some one else would have been still more welcome. And why should not he? After all I had no pretensions to Julia's love, though I confess to having looked at her with greater interest on account of that passage about the German philosopher. I felt great sympathy for Ned, a sympathy that grew livelier with the thought of that "heretic" as I termed him, rejoicing and feasting at hospitable Ardglas.

But as usual, I am wandering away and will once more forget my subject and all about it. Be kind enough, gentle reader, when I sin again to bring me back to my senses, either by means of a pin carefully inserted into my body—which process invariably awoke the drowsy Pillicoddy—or by a tap of your riding-whip, if you have one, as—well, never mind who—I had come prepared to see the ladies somewhat sorrow-stricken and the beautiful Julia pensive and sad, but from a cause I was soon to know, they wore smiling faces and their eyes, (hers—properly speaking) flashed with pleasure and anticipation. Old Marston himself seemed to have abandoned for the nonce, that gruffness which had procured him among the country people, the surname of "the black bear." There was an unusual festive look about the dark room—the huge fire crackled and roared as I had never heard it before—and the

stately family portraits catching at the general light-heartedness, winked and grimaced to each other in a most unwonted manner. Having timed myself very correctly, I had arrived just twenty minutes before luncheon with the firm intention of enjoying the good cheer of the Hall, and in this I was not disappointed (a thing I abhor, being deceived in such matters; I have never forgotten my inward indignation on seeing the owner of a mansion to which I one day repaired, quietly "slope" off the path and disappear behind a convenient haystack. Of course when I rode up to the house-door, I was told that every one was out, as if I were not already painfully aware of the fact.) After the meal, Mrs. Marston went away to look after her household affairs—I always excused her with unfeigned joy; oh what dinners we did have, when she was there!—and Julia retired to her boudoir to indite an affectionate note to one of my sisters, which notes invariably contained a great many underlined passages and five or six post scripts, together with a cargo of "kind loves" sufficient to have peopled Siberia.

Being thus left alone with the old gentleman, I began to cast about for a beginning to my cut-and-dry revelation of Ned's fortune and fate, when, as I was in the midst of a most intricate conversational problem, Mr. Marston suddenly broke the silence by saying:—

"Come, Frank, another glass of claret, and let me hear about Mr. Gray's wonderful Vergil."

I gazed at him in speechless surprise, the orifice of my mouth closely resembling in form and size that of those giant gaping faces you throw apples at, in the vain hope of getting something for your trouble. How on earth he knew about the Vergil, the possession of which by Ned we had fancied a profound secret, was an enigma I vainly tried to solve during the time that my features gradually resumed their normal appearance. I must have looked a thorough idiot, for my companion after vainly trying to restrain himself burst into a loud, hearty peal of laughter, such as I had never yet heard from "the bear." This increased, instead of diminishing, my astonishment. As soon as I had recovered from my intense surprise and rudeness, I apologized to Mr. Marston.

“But you know, sir,” said I, in conclusion, “that I fancied the whereabouts of that book a secret known only to—to—to my friend and myself.”

“Your—your—your friend and yourself. Why, man alive! don’t you call him by his name, instead of stammering away like a school boy over his French version?”

“Only the fear of displeasing you by speaking of one who, I am aware, has offended you causes me to refrain from naming him.”

“Very well, as you please; still you cannot refuse to drink a bumper to the health of your—your—your friend, who, I trust, will soon be my—my—*my* friend.”

“Really, sir, I cannot but fancy that there must be a mistake somewhere. The friend I mean ——”

“Is Ned Gray! anything else you can urge against his being the friend *I* mean?”

“No sir; I can only give in and sit in silent wonder.”

“That you shall not—at least for more than a few hours. Be kind enough to mount your horse which is now brought to the front door, and ride to Mr. Gray’s; present my compliments to him and say I would feel obliged by his coming to dinner to-night. As he may not care to come alone, you had better get that other accomplice of yours, Dick Westfield, and betake yourselves hither by seven o’clock. And take care that Mr. Gray be not late, as we shall not wait for any one.”

“Be sure of that, sir. The difficulty will be to keep him from being here an hour before. But may I not ——”

“No certainly. Take yourself off as rapidly as you can and don’t forget Julia’s note to Miss Stanley. There, be off.”

“As you please, sir. *Au revoir* then, and for a speedy solution of the mystery.”

In another minute, I was careering over the smooth turf of the park, striking towards a well-known fence, frequently leapt by me when going to see Ned after having been at Marston Hall, and wondering how the owner of this mansion had come to know about the Vergil—(about the other affair, the love-matter, I mean, he was already pretty well informed,) and puzzled to account for this sud-

den change in his manner, which, although always kind and affable towards me, had never yet been so engaging or agreeable.

The pace at which I had started, and which my noble horse had kept up with unflagging zeal, soon began to draw me from the deep reverie into which the unexpected events of the forenoon had plunged me, and I own that, eager as I was to know the meaning of all that was happening, and to acquaint Ned with his surprising good fortune, I could not help casting all reflection to the bracing breeze that blew over the country, and was even so much excited by the rapid ride, that another small concern which touched me much more nearly, faded from my thoughts, and Herr Sauerkraut was forgotten totally in the delight I experienced at leaping the hedges and fences that yet divided me from Ned's habitation. I got there with my steed smoking all over from its smart gallop, and considerably astonished the whole Gray household by the way in which I ascended the stairs to the "den." There I found my friend, almost exactly as I had expected, that is, with a long churchwarden between his teeth, and a portrait of his lady-love, on which, I have not the slightest doubt, he was in the act of imprinting a series of progressively passionate kisses, just as he heard my footstep at the door, for as I entered he started up hastily from the couch on which he lay, and blushed very violently from no visible cause that I could discover. For one moment I felt tempted to abuse the chance I had of quizzing him, but "the inborn nobleness" of my nature triumphed over this unworthy feeling, and instead I insisted on performing a most noisy and riotous war-dance. This sacred rite accomplished, I condescended to accept a cigar which he did *not* offer, being too much "dumb foundered" (excuse such slang, I pray you,) at my sudden irroad upon him at the moment when he fancied me smoothing down the "bear." (By the way, I dare no longer call him that, or Ned would break my head for my pains.) After torturing him for a very, very short time, I told him exactly what had passed between Mr. Marston and me, repeating the message at least a dozen times before he could be in any degree satisfied. Scarcely was this done than he poured out a flood of questions which I did not trouble myself to answer, be-

cause I should have had to sit there till midnight at least, and that I could not well do, having to call on Dick and then go home to dress for the evening. So I cut short Ned's excited inquiries and extravagant joy, and got him to keep quiet for one minute, while I gave him to understand that I and Dick should call for him with the carriage on our way to Marston Hall. Westfield was no less surprised than I had been at this unexpected turn of affairs, for though the Marstons had renewed their intercourse with his family, he had thought it wise to keep out of the old gentleman's sight till the memory of his misdeeds should somewhat fade away from his mind. He thoroughly entered into the spirit of the affair however, and vowed eternal amiability to the whole family at the Hall.

At home, I found they either knew or guessed something of the matter, for I met my sister half-way down the avenue, anxious to know whether I brought her a note from Julia or not. I handed her the scented epistle (which I had taken care not to show to Ned, or I fear some rash deed had followed,) and begged of her to enlighten me on the matter. But she hypocritically feigned complete ignorance, though the smiles that lighted up her face told another story.

Well, to make a long story short, Dick and I called for Ned, and found him dressed most carefully and superbly. He must have spent almost all the time that elapsed between my afternoon call and six o'clock in dressing for this eventful occasion. As seven struck, we three entered the drawing-room at Marston Hall, and were received most affably by Mr. Marston himself, who was alone in the apartment. This, I fancy, he had arranged purposely, so as to enable Ned, who was at first terribly embarrassed, to throw off his uneasiness at his novel and unexpected position, and be master of himself before Julia and her mother entered the room, which they did soon after. Oh how Dick did grin when he saw Gray attempting to put on an unconcerned look as he shook hands with his "*inamorata*," and his utter failure. Then at dinner, where he did not sit next, but opposite to her, he became painfully conscious towards the end of the meal, that his "*aparte*" looks were no more

so than any "asides" ever are on the stage, and his hurried dash to open the door for the ladies, when Mrs. Marston with a "Julia, my dear," rose from the table and went to the drawing-room, from which ere long resounded the beautiful melody of the "Message," which caused him to look exceedingly eager to be off, though Mr. Marston was evidently keeping up the conversation as long as he could, to bother him "just a little." And certainly that was not a very great revenge for a cut nose, a black eye, and a good deal of bad temper; and I know that that is the only one he ever took.

However desirous I might be of enjoying the music, and of taking part in it, I was still more curious to know the promised solution, and I accordingly pressed Mr. Marston to fulfil his promise. In this I was warmly seconded by Dick, and even the amorous Ned became clamorous on the subject. After the old gentleman had badgered us for a moment, he let out the secret—which was that my father, nowise daunted by the ill-success of his first attempts, had renewed his attack upon him, and after a great deal of reasoning and talking, had finally convinced him of the injustice of his conduct towards his wife and daughter. My father's arguments were greatly strengthened by an event wholly unexpected by any one either at Marston or Wortley, namely: a gratifying change in Mr. Marston's fortunes. It was only now that it became known that he had for several years been in very narrowed circumstances, which fact was at the bottom of his dislike to calls and ceremony, and the anxiety which he naturally felt on the subject had been sufficiently great to sour his temper, and lead him to adopt a gruffness which was calculated to repel any but the most determined visitors, and which drove even these away after a few hours. The old and tried friendship my father bore him, and which was amply repaid in kind, had won for me the favour of being the only young man admitted to the intimacy of the family.

A few months since, however, he had been advised that the large fortune of a distant relation had fallen to his lot, and had been called to London suddenly to take measures to secure the inheritance, some other family having laid claim to the estates. It was on his return from this business that he had reached the Bower and come

upon Ned and Dick doing the amiable. He was out of temper at the obstacles thrown in his way by litigation, and at having had to come as far as the Bower to see his wife, whom he had fancied he would have found at the Hall. The precipitate flight of the two visitors was "the last straw," and his wrath, seeking an outlet, vented itself on the ladies and the absent adventurers. The bad news which he continued to receive from his lawyers in London for several weeks after this, kept up his anger and sullenness; but when at last his title to the fortune he claimed was proved, he relented—fell back into his real disposition, and as suddenly restored full liberty of action to his wife and daughter as he had deprived them of it. Feeling himself able to indulge once more in those feasts and that social intercourse which he had forbidden himself when poor, he determined that his first act should be the fulfilment of his daughter's wishes. As for the Vergil, the mystery was soon explained when he informed us that Ned's college-tutor had been his own school-fellow and constant correspondent. In fact the two had contrived the scheme between them, to give Ned a glimpse of hope, long before he could know of his impending good fortune.

Here ends my tale. What need to tell of the pleasant evening spent in music and conversation? How Julia played over the "Doux Souvenir," my favorite of Mendelsohn's "Lieder ohne Worte"? How Ned sang duets with her till she was nearly hoarse, or how he kept us waiting for more than five minutes, while he and Julia were looking for that song in the parlour, which must have been very difficult to find. Never mind; for his exuberant joy somewhat lightened my private anxieties.

Two days afterwards, I was in London, and repaired to the railway station at night. There Dick and Ned saw me safely into a carriage, and I abandoned myself to my thoughts, building castles in the air, and peopling each and every one with loved forms, chief among which was that of—Sauerkraut? No, but of somebody else.

PHILARÈTE CHASLES.

“Foster therefore the intercourse of intelligence ; facilitate the relations between races.”

And few men have more systematically and thoroughly applied themselves to the task than he who wrote the above words. With patient and unremitting toil Philarète Chasles selected in English, German, Spanish, and Italian literature, the best and most characteristic works, and re-produced them in his native tongue, in the garb which would find most ready acceptance with, and be most easily appreciated by, the French nation. While the war raged fierce between Classicists and Romantists, instead of joining in the wordy contest, as to the merits of foreign literatures, he undertook to make those known to the disputants on either side and the vast mass of onlookers that still remained undecided.

During a space of forty years therefore, he continued to produce brilliant criticisms and studies of works known too often only by name. He traversed almost every field of literature, and initiated the French reading public into the mysteries of Gœthe, of Schiller, of Lessing, of Shakespeare, of Cervantes, of Lope di Vega, of Dante, and innumerable other writers. He gave proof of immense power of analysis, of correct appreciation, of subtle discrimination ; he laid the foundations of a new system of classification in literature ; he pointed out the true bent of the genius of every author he criticised ; in a word, he taught France foreign literature both skillfully and thoroughly.

It would indeed have been a matter of wonder if Chasles had not sought to embody the results of so much study and labour in some more compact form than that of his collected works. His “*Questions du Temps et Problèmes d'Autrefois*” may be taken as the summary of his researches and meditations.

Divided into six books, treating severally of Philosophic, Social,

Historical, Literary, Moral, and Art Questions, it forms a perfect compendium of doctrine, in which every proposition is logically deduced from its predecessor, and in which are discussed some of the greatest problems man has to solve.

Written in the form so dear to La Rochefoucauld and so difficult of attainment, that of detached Thoughts or Maxims, the book gives evidence at first sight of profound knowledge of every subject treated of in its pages. There is not one of the five hundred and eighty-five links in the chain that might not be made the subject of a separate essay, and though one distinguishing feature is the skill with which each proposition enunciated is forcibly derived from the one preceding it, and imperatively necessary to the right comprehension of the one that follows, there are, nevertheless, many scattered throughout the volume which stand whole and complete in themselves as self-evident truths.

For instance, the following cannot be taken from their respective sections without breaking the chain of reasoning, yet each is a truism :—

“ A man is ever the same, and he changes incessantly.”

“ Whatever isolates us, diminishes us.”

“ Of all struggles the hardest is the moral struggle against our own time.”

“ Genius is not the slave of what oppresses it ; it suffers from it, but becomes stronger thereby.”

“ The *dead languages* are *types* of extinct civilisations.”

“ No translation is true.”

“ Love is the desire of completing another’s happiness by means of our own.”

“ Envy is self-confessed inferiority.”

“ Science cannot do without truth : Art cannot either.”

“ Every national sentiment creates its national architecture.”

And there are many more which might be quoted. But let these suffice ; of themselves they will reveal the depth of thought in which Chasles indulges, a depth which may be better sounded by reading any one chapter of the “ Questions.”

Clear and lucid the style invariably is ; clear, notwithstanding

the greatness of most of the subjects discussed; lucid, because of the wonderful earnestness of the man, who fuses a thought till it glows. Every sentiment is stripped of ornament, no cumbersome graces obscure the sense—all is vivid and distinct; and the mind, pleased and helped, easily grasps the terms of the problem set for solution. And what problems they are that Chasles sets, may be perceived from the headings of his chapters:—Of God; of Nature; of Revolutions; of War; of Epochs; of Bonaparte; of Shakespeare; of Women.

Rising high above all petty distinctions of nationality, the writer seeks to bring together the best of every land, so as to teach humanity the value of free intercourse of minds; he labours unceasingly at the establishment of truth and order; he shows up the faults of the world, and points out the remedy. He treats of nothing lightly or carelessly, but brings to the consideration of every topic the full power of his erudition and philosophy. He waxes eloquent too, though seemingly precluded from becoming so by the very nature and form of his style, for what is the close of the eighth chapter of his second book, in which he treats of mediums, and which he sums up thus: “To rebel is childish; to yield is cowardly; to resist is manly,”—but eloquence? And again in his concluding lines on Gœthe:—

“This is especially the grandeur of Gœthe, whose mind was vast in its depth, loftiness and extent:

“The pivot and central point of two civilisations; the antique and the modern:

“He who cannot rise to Gœthe is of the past. He who enjoys him, of the present; he who understands him, of the future.

“It is Gœthe who listened most attentively to the great orchestra, and, as it were, to the symphony of new civilisations, with their different tones, their respective value, and their requisite rests.”

Chasles admires Gœthe no less than does the great English thinker, Carlyle. Compare the above passage with the well-known one in “*Sartor Resartus* :”—“‘But there is no Religion?’ reiterates the Professor. ‘Fool! I tell thee, there is. Hast thou well

considered all that lies in that immeasurable froth-ocean we name LITERATURE? Fragments of a genuine Church-*Homiletic* lie scattered there, which Time will assort: nay—fractions even of a *Liturgy* could I point out. And knowest thou no Prophet, even in the vesture, environment, and dialect of this age? None to whom the Godlike had revealed itself, through all the meanest and highest forms of the common; and by him been again prophetically revealed: in whose inspired melody, even in these rag-gathering and rag-burning days, Man's Life again begins, were it but afar off, to be divine? Knowest thou none such? I know him, and name him—GOETHE!

One of the most wonderful chapters in the whole book is the one in which he treats of "God." The language is on a par with the thoughts: grand, powerful, clear. The opening sentence has a Miltonic turn, it calls up a whole picture at once of

"a dark
Illimitable ocean, without bound,
Without dimension."

It is a fit prelude to the one that follows. "A world without motion," says Chasles, "is death itself." And then he continues—"Atheism is not."

This lofty strain is sustained throughout. "Whence," asks he again, "does divine, primordial *will* spring!" And concludes:—

"Such are the simple terms of the great problem:

Either motion is eternal, uncreated, involuntary;

—Or it is passing, created, destructible.....

Either creation is fated and limitless;

—Or it is free and limited.

On the one hand, creation, liberty and will;

On the other, no creation; fatality, necessity.

Before these definitive terms of the problem the human mind sinks."

Is not this the problem that made Faust sick at heart and anxious? That makes every thinking man pause at some one time and lose himself

"in unsatisfying thought?"

Chasles is very happy in his illustrations. Not so much on account of their own novelty, as because he looks at things from new points of view; he has an original manner of his own, which consists in placing in a strong light some well-worn, hackneyed fact, and thus bringing out features and salient points hitherto unnoticed. He seizes, with acute perception, on the often hidden connection between the things of the Past and the Present; he reveals suddenly some ignored resemblance, some unsuspected link. He not unfrequently indulges in a startling proposition, which he then methodically and carefully proves; in a word, he is an original thinker; and puts the result of his cogitations clearly and forcibly before the reader's mind. He looks at History, not as a mere "lumber-room of dusty documents," not as a collection of names, dates and events, in which dynasties, battles and treaties are of chiefest interest, but rather as the record of the working of certain principles, and of the necessary results of certain combinations. He discusses History as a Philosopher, not as a Recorder. He analyses the effect of the separation of races into nationalities, languages into dialects; he strives to show how all such divisions and separations tell against the march of civilisation, how the more these barriers that national and local pride have thrown up are destroyed, the more will the world benefit thereby. Deprecating the isolation of one people from another, by whatever means or for whatever end, he says "Whatever isolates, diminishes us." True to his life's work, he strives to make every nation appreciate the works produced in another land, for "the very grossest barbarians alone pretend to abolish communication, to extinguish light-houses, to tear up and destroy railways. "Corneille is Spanish, Voltaire is English, Shakespeare is Italian, Dante is Provençal. Yet who more English than Shakespeare, more Italian than Dante, more French than Voltaire?"

In that part of his book which treats of social questions, he attacks the numerous classes of Tartuffes who still flourish in every part of the world.

"Mistrust," he says, "all that ends in *ism*: *sophism*, *liberalism*, *fanaticism*."

The rest of the passage is well-nigh untranslatable.*

The chapter on Revolutions is one full of deep significance and import, and at this time will be read, along with those on France and Bonaparte, with special interest.

Chasles disbelieves in revolutions as means of obtaining lasting good, and frequent revolutions, he holds, are more likely to bring about the worst state of feeling in society: indifference to good and evil. Nor do revolutions bestow liberty—it is only passing from one despotism to another. Too well is he borne out by what has been seen in France, and thoroughly do some continental nations understand the lesson taught in History, and summed up by Chasles in one short chapter, which is so characteristic and true that it is here transcribed in full.

“REVOLUTIONS.

“Stimulants do not give strength; comets do not give out heat, and revolutions do not give liberty.

“The good Delécluze told me that during the course of his life (1789 to 1865) he had counted thirty-two revolutions, great, small, and medium.

“Women who have had too many lovers remember none.

“Nations which have suffered too many revolutions do not preserve the remembrance of any duty.

“Twenty constitutions are equivalent to none. After having had a hundred favourites, Phryne is still a virgin.

“The indifference to good and evil springs therefore from revolutions.

“*Majorities* are revolutionary, that is, friendly to enormity and license.

“*Minorities* tend to order, to the healthy evolution which protects them.

“Intelligent evolution gives birth to respect for *minorities*, which in its turn, protects the fruitful development of evolution.

“Indulgence to the weak and to minorities springs from normal evolution.

* Defiez-vous de tout ce qui finit en *isme*, *sophisme*, *liberalisme*, *fanatisme*, *servilisme*, *fatalisme*.

L' *humanitarisme* est a la divine charite ce que le *sophisme* est a la sagesse, le *liberalisme* a la liberte, et le *fanatisme* a la piete.”—*Questions*, Livre I, chap. 1.

“ Revolution—which is unchecked evolution—is barren.

“ Evolution—which is normal revolution—is fruitful.

“ Evolution rules itself. Revolution calls for a dictator.

“ Revolutions raise too much dust, which blinds souls and extinguishes minds.

“ Since contrary laws counterbalance each other, free evolutions are necessary. Favour them.

“ Violent revolutions destroy the laws which they ought to affirm by giving them weight.

“ In France revolutions are purely theoretical.

“ In England, social evolutions are practical.

“ The passions and strong likings of our race rarely allow of its enjoying virile, powerful, and healthy evolution.

“ Woe to whoever rushes into theoretical, feminine, feverish revolutions, for they destroy. 1

“ We always lose by our revolutions, while England gains by hers.

“ During the last hundred years, she has emancipated the Catholics, freed commerce, extended franchise, broken a thousand bonds; and lived in a continuous and unperceived state of revolution.”

In the chapter immediately following this, Chasles displays several times his peculiar talent for characterizing a man or defending a thing in one short sentence. Speaking of the famous Machiavel, whom he by no means admires, he says “Machiavel is a moralist who has been undeceived and who repents and avenges himself.” Machiavel is taken as a model, and admired only in times when craft reigns supreme; of his school are those statesmen who “concern themselves not about the morality of things. They knead up facts and handle the dirty clay of human affairs, caring little whether they soil their fingers or stain their workshop with blood.” Do not the names of certain potentates and ministers rise to one’s lips on reading these words?

He is not like almost all Frenchmen, so dazzled by “*toutes les gloires*,” as to lose his clear-sightedness in matters affecting his country and its great men. This is abundantly proved in his book, notably in his reflections on “War,” on “Bonaparte” and on “France.” His division into two classes of the Wars of the great Napoleon, must strike every one, not blinded by party prejudice,

by its truth and correctness. "From 1795 to 1800 the wars of the Republic and Napoleon are crusades of ideas;—generous wars;—wars of expansion and renovation.

From 1795 to 1800 France had fought for ideas;—from 1800 to 1815 against ideas.

So the movement had changed; instead of protecting ideas as at first, it now destroyed them."

And is not this frequently, nay, invariably the case with successful wars? Could not some similar division of the present Franco-Prussian contest be made? Chasles naturally enough passes from this subject to the war which every man is called upon to wage against the evils and sins of the world, and in this section he preaches with no slight converting power. Nor does he leave room for the least sophistry, for the least equivocation:—"What have I done? How far have I served and helped forward the Great Work? That is what each of us must ask himself when dying.

"And we must be able to reply:—"I have struggled as far as in me lay for what I believed to be good and just. I have neither attacked or wounded any superior man, any honest man of my time; but with all rascals have I quarrelled;—a fine thing—but dangerous."

How to act so as to be able truly to answer thus, he sets forth in his chapters on "Struggle," "Scale of Races," "Mediums."

It has been said that Chasles defines with striking accuracy the character and genius of individuals; not less correct is he in his definition of epochs and ages. He seizes on the reigning thought of a century, strips it bare and lays it before us in its simple majesty, content with indicating what consequences it necessarily entailed. Thus it is that he contrasts the seventeenth and nineteenth centuries in two of his admirable sentences:—

"There is a disease of the *Infinite*, which belongs to the seventeenth century. It killed Pascal and afterwards Novalis.

"Children of the nineteenth century, we are a prey to the fever of the *positive*, of the *finite*, of matter worked out."

There is evidence of deep observation and right judgment in those excellent chapters which follow, and which, like that on Re-

volutions, must be reproduced in full to be properly understood. In them is seen a Frenchman philosopher enough to judge his nation with equity, without unduly praising or abusing it. Chasles' judgments, indeed, are always moderate and just; there is no trace of prejudice or prepossession, but a fixed honesty of purpose and a marked impartiality prevail. It is too often the practice to grant certain qualities to a nation, so as to be at liberty, as it were, to defame it for not possessing others in a like degree—but very different is the author's method. However small may be a nation's share of some quality, he does not hesitate to recognise it, and fails not to count it against the tale of sins and follies.

In this wise speaks he of

FRANCE.

“The sure way to miss success in France is to miss the opportunity.

“The *à-propos* governs the French; any delay makes them angry and impatient.

“The Frenchman cannot wait. To him time is as if it were not.

“He will not even be made to wait for the end of a sentence in order to understand it. It must from the very first be intelligible, and fix itself in the mind with the speed of an arrow.

“With such a heroic temperament, one soon gets to extremes.

“Then one must halt.

“Thus does the pendulum of a clock swing between two points, swift, breathless; then stops, exhausted, in the centre.

“As I write, we are sighing for repose. We are tired;—we are tuning our instruments.

“In French *apprendre* means to teach one's self—and to teach others.

“This confusion of sense is profoundly characteristic. It is the heroic propaganda of France; to instruct others, is to teach one's self; who instructs himself serves his fellows.”

BONAPARTE.

“The life of Napoleon the First is the epic poem of Algebra.

“That life is ended by a terrible and instructive solution.

“Napoleon,—algebra,—inherited the chaos which revolution had made. So number follows disorder, algebra reality, order confusion.

“ Napoleon preferred figures and *distinct* styles :—*tragedy, history, epic*. Being the personification of *algebra*, he despised the gradation, *woman* and nobility.

“ Life, which is fruitful, is movable ; so immovable algebra always breaks when it comes in contact with life.

“ Napoleon’s $a+b$ encountered two chances, two unknown quantities, two x , which conquered it :—Madrid and Moscow.

“ The snows of Russia and the sun of Spain vanquished Napoleon ; unexpected realities overthrew the certainties of algebra.

“ Before Montenotte you see Bonaparte—the man, the sword, the little gray hat. At Austerlitz, the chief, the master, and the war-horse. After Austerlitz, the draped robe, the sceptre, the actor’s part.

“ The hero Bonaparte disappears at Montenotte. Napoleon the Great arises. The public and imperial part begins at Austerlitz.

“ Thus Napoleon passes from heroism to the enjoyment of power, and from power to theatrical display.

“ From reality to splendour ;—from splendour to costume.

“ As men are children they have especially admired this last phase—that of costume.”

Sharp, bitter words these, yet how true. And how visibly Chasles brings before us the whole of the wondrous career of the great soldier ! As you read you see the pale, thin face of the young general “ with eyes in which burned a feverish light ;” the form clad in the plain manly uniform of the republic, you hear the voice commanding the charge, and watch the rush of men, ragged and half-starved, drive back the proud Austrian army. Then the man appears to you on that memorable December morning, when the sun of Austerlitz rose on the battle of the Three Emperors ; and again in his capital, decked out with trappings unseemly on a warrior ; in the long wild flight from Moscow ; in the twilight of that June evening with the Prussian host after him, and last of all, on the rock in mid-ocean. It is no slight talent that of sketching in so few words such a man and such a career.

The result of Chasles’ study of authors and their style, is well seen in his mode of treating Literary Questions. Beginning with definitions which clearly make out the peculiarities of nations, he analyses the style of the greatest authors of all times and places, and draws forth lessons which, condensed into a few lines, are worth

whole volumes of rhetoric. Here too he brings his critical genius to bear on the question at issue, and assigns to each nation its distinguishing characteristic as regards languages. Of all men Philarrète Chasles was most competent to speak with authority on the peculiarities and idioms of each tongue, on the difficulties of translation, difficulties so great and often so carelessly met as to have given rise among the Italians to the epigram "*Traduttore, traditore.*" He who had inaugurated a new style of translation, which consisted in exposing the main idea of a work and then interpreting the context, could well say "No translation is true, for the shades which exist in the one idiom are not to be found in another." He could point out better than most men the connection between musical and literary composition, and describe the *verb* as the *rhythm* of prose writing. "Every prose-writer of genius creates his *verb*; every composer of genius creates his *rhythm.*"

His strictures on the growing use of epithets and adverbs, and their deadly influence on the force and power of prose, are right and true, and the list of famous authors which he gives as partial to the constant use of verbs, as opposed to adjectives and adverbs, might be greatly increased by any one who has studied the styles of the great masters. His charming disquisition on Poetry and Rhythm is studded with brilliant thoughts set in a solid groundwork of reason. Constantly adducing *facts*, he seldom fails to convince. Little cares he for the species of literature now, alas! too prevalent, and of which novels of the Guy Livingston and Foul Play school are the best representatives. He abhors as unreal and unartistic the sensational drama, and the whole range of what might be called Muscular Literature.

He detests the fashion confirmed by Voltaire, and used by all envious critics, of opposing one author's work to that of another, without the slightest regard to truth or justice. The feud between English and French *litterati* as to the merits of Racine and Shakespeare, he settles in a very few words. "Racine is not annulled by Shakespeare. That is a stupid idea. Nothing is destroyed." Then follows an analysis as beautiful as clear of the characters of

Narcisse and Iago, which he takes to represent somewhat the particular bent of Racine's and Shakespeare's genius.

In the chapters devoted to "Women" and "Love," Chasles becomes grand and impressive. In language both noble and sustained he advocates the necessity of improving woman's status, first defining her destiny, which is "to live of the life of others." Easily does he perceive that weak point in ancient polity, the contempt for woman:—"The faults of Greek antiquity are explained by its contempt for woman." Great truths are contained within the fourteen maxims which constitute this chapter; truths worthy of being thought over and put into practice, to be held dear by every right-thinking man.

Little mercy do La Rochefoucauld's maxims meet with at Chasles' hands, for widely apart are the two points of view from which these men look upon love. The former coldly bringing it down to selfishness, the latter indignantly combating the Duke's argument. "Love is not the desire of being happy ourselves at another's expense, as that monster born at the end of the eighteenth century affirmed. Love is the desire of completing another's happiness by means of our own." What better definition can there be than this? How it throws into the shade Chamfort's epigram and Lytton's sentence!

Love, according to Chasles, is all-powerful; far from being selfish, it is self-denying; it is a mighty influence that will change the sternest heart; it will ennoble a people or an individual, it will rescue them when sunk; it is cheering, sweet; it governs and regulates races; it is the sworn enemy of contempt: mix but the latter with it, you have poison. A race despising love is a race struck with death and rotten at the core. Love is a purifier, a strength-giver—destroying self, destroying egotism. It exalts and expands the mind; from it spring charity and truth. And love, charity, and truth are antagonistic to cruelty, envy, and falsehood, which narrow the soul and abase man. "Envy is self-confessed inferiority." "Lying is a beginning of madness."

The cry of the age is "Science!" Science everywhere, in everything. "The beautiful," says Chasles, "(triumphant art)

descends from its throne ;—now comes the new reign, that of *science*, seeking the *true* and analysing it.” The beautiful is one, the true is complex. As the world grows old it becomes more complex ; therefore it calls for more science, which investigates truth. All antique nations were poorly scientific, but highly artistic ; nowadays Art is at a low ebb, science is rising and is becoming sovereign mistress of the world. Needless to fight against the inevitable—it is not merely a medium, an agglomeration of influences, it is a *thought*, an idea, and thought cannot be destroyed or withstood ; it must and will work itself out, and howsoever long opposed it emerges triumphant at last. The thought which lay at the bottom of the Reformation movement conquered all obstacles thrown in its way ; the thought that demands the better assertion of woman’s position and its fellow-thought that works against needless warfare, are both fiercely attacked in these days of ours, yet both will in their good time assert themselves and sway society. The efforts of science to gain the highest place must ere long be crowned with success—already discerning eyes can see what vast strides it is taking towards the fulfilment of its end. So has every thought that ever agitated the minds of men finally come out into broad day and been acknowledged. Every branch of learning has thus striven after perfection, and many will yet be seen tending to this consummation.

At various epochs in the world’s history appear men who, long before the world is ready, proclaim the advent of a new thought, who

“ . . . dare
To name things by their real names.”

Some few disciples, earnest believers, do they find, who dimly hear the voice of Truth loud-sounding in the Future, and who gather reverently the words that fall from their masters’ mouths, to repeat them afterwards to wondering, incredulous crowds. Never have these masters *seen* the realisation of their hopes—like the Prophets they have prayed to do so, but the Time was not full—they died, and the world forgot them for a space, but long years after have these Messengers been known for what they were, and men

have praised their names. Deep in their hearts lay the conviction of eventual success—the Thought could not die—it would assuredly be felt over the whole Earth. Each of them said the same thing

“If I stoop
Into a dark tremendous sea of cloud,
It is but for a time; I press God’s lamp
Close to my breast: its splendour, soon or late
Will pierce the gloom: I shall emerge one day.”

What does Chasles seek to prove in his book? The law of *progress*. And establishing the fact of contrary laws, antagonistic to each other, laws which by this action create equilibrium, rhythm, he deduces progress, the law of life and of the world. In the whole range of the vast field he has traversed, he has still found that law working and ruling. And he has learnt many maxims in the course of his explorations, many truths all tending to that one great truth. These he exposes faithfully as beseems his mission. Does he consider his task done? No. Still working, still struggling, he spreads abroad the knowledge he has acquired. He has instructed himself, and now instructs others.

“Who instructs himself, serves his fellows.”

F. C. SUMICHRAST.

Editorial Chair.

THE UNIVERSITY OF KING’S COLLEGE, WINDSOR, N. S.

A detailed account of the University, of the various Chairs, Scholarships and Exhibitions will appear in our next number. For the present we shall confine ourselves to a brief enumeration of the various advantages it presents as a centre of education in the Lower Provinces.

It is the only University in Nova Scotia enjoying a Royal Charter. It is empowered to confer degrees in Arts, Law, Divinity. And it is proposed to confer degrees in Science, in order to meet the requirements of the age and of a rising colony. It offers to its undergraduates TWELVE SCHOLARSHIPS of the value of £80 currency per annum, besides various valuable prizes, such as the WELSFORD, the AKINS HISTORICAL, and the GENL. WILLIAMS prizes.

It is the only University which offers Eighty-five Nominations, which are virtually scholarships. Any student obtaining one of these nominations “is exempt from the payment of yearly fees, amounting to more than £53 for the three years’ course, including the fee for a B. A. degree.” In other words the University offers to the country to educate eighty-five youths free of fees, thus effecting a saving of over £1500 currency annually.

There are no religious or otherwise exclusive tests required—any student being at liberty to attend the religious services of his own denomination. Thus

there is nothing to debar any undergraduate from attaining to the highest honours in the University.

King's College is the richest Institution of the kind in the Province, as may be seen by the subjoined extracts from the official Reports on Education. It possesses the largest Library in Nova Scotia, and the course of instruction now comprises English Literature and History. It has a peculiar claim to the support of all interested in the prosperity and welfare of the Province, by the fact that the ablest men in Nova Scotia have been trained within its walls. It is, moreover, the most ancient of all British North American Universities.

EXTRACTS from Official Reports of Superintendent of Education in Nova Scotia :

COLLEGE.	HISTORICAL.			PRIZES.		LIBRARY.		Estimated Cash Value of Apparatus.	ENDOWMENT.		INCOME.			
	When founded.	Total number matriculated for full Undergraduate Course.	Total number graduated B. A. in Course.	No. awarded during year.	Value of Prizes awarded during year.	No. of bound Vols. added during year.	Total number of bound Volumes.		Funds invested.	Value of Real Estate owned.	From Funds invested.	From Real Estate.	Fees, Contributions, etc.	Provincial Grant.
1866.	A. D.				\$			\$	\$	\$	\$	\$	\$	
King's	1788	502	271	1	190	20	5800	4500	92715	unknown	5508	.....	1400	
Dalhousie ...	1820	62	2	15	109	0	.....	1700	52100	50000	8090	800	.....	1000
Acadia	1838	240	87	0	0	65	2900	600	38000	24000	2102	697	986	400
St F. Xavier's	1854	1	0	0	0	20	2000	480	.....	.....	.....	.....	168	1400
Mt. Allison..	1862	28	13	2	30	.....	3000	500	10000	15000	600	.....	1357	400
St. Mary's...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	670	1400
1867.					\$			\$	\$	\$	\$	\$	\$	
King's		502	280	9	220	60	6000	2500	88415	12000	6500	320	.....	1516
Dalhousie ...		74	11	16	120	.....	.....	1700	52100	50000	3090	800	.....	1083
Acadia		250	91	9	195	56	2956	600	38000	24000	2184	620	2300	488
St F. Xavier's		3	3	0	.....	.....	2000	480	.....	.....	.....	.....	189	1516
Mt. Allison..		32	19	.....	.....	.....	3000	500	10000	15000	600	.....	2871	433
St. Mary's ..		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1516
1868.					\$			\$	\$	\$	\$	\$	\$	
King's		512	283	9	220	60	6060	2500	88415	12000	6500	320	.....	1400
Dalhousie ...		84	17	19	140	.....	.....	1700	52100	50000	3090	800	.....	1000
Acadia		271	101	10	215	28	2984	600	30012	24000	2159	685	816	400
St F. Xavier's		18	7	.....	.....	50	2050	480	.....	5000	.....	.....	340	1400
Mt. Allison..		34	23	.....	.....	100	3000	500	10000	15000	600	.....	1909	400
St. Mary's...		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1400
1869.					\$			\$	\$	\$	\$	\$	\$	
King's		519	284	5	234	126	6186	2500	92301	12000	4588	.....	.....	1400
Dalhousie ...		101	22	19	252	1000	1000	1700	52100	50000	8090	800	.....	1000
Acadia		289	111	9	195	28	8012	600	80812	15000	2145	200	1347	400
St F. Xavier's		28	9	.....	.....	.....	2050	480	.....	5000	.....	.....	224	1400
Mt. Allison..		39	26	2	60	290	600	500	10000	15000	600	.....	1590	400
St. Mary's...		.....	.....	.....	80	15	1125	.....	.....	.....	.....	.....	746	1400

NOTE.—The Report for 1870 is not yet published.

NOTICE TO SUBSCRIBERS.

Subscriptions received through any Bookseller.
Special arrangement entered into with Clubs.
All subscriptions payable in advance.
Agent in Halifax: M. A. BUCKLEY, HOLLIS STREET.

NOTICE TO CORRESPONDENTS.

All communications to be prepaid, or they will be refused.
Every MS. should bear the NAME and ADDRESS of the Sender. Every contribution will be carefully considered, and unaccepted MSS. returned on receipt of stamps for postage, but the Editor will not hold himself responsible for any accidental loss or delay.

MSS. should be legibly written and on one side of the leaf-only.

All communications to be addressed to

THE EDITOR OF THE
KING'S COLLEGE UNIVERSITY MAGAZINE,
WINDSOR, N. S.

ACKNOWLEDGEMENTS.

THE ACADEMY GOSSIP—Mount Allison. Vol. I. No. 1.

THE DALHOUSIE COLLEGE GAZETTE. Vol. III. No. 10.

THE COLLEGIATE MONTHLY—Clarion Coll. Inst., Kilmersburg, Pa.
Vol. I. No. 6.

TWELFTH AND THIRTEENTH ANNUAL REPORTS, PROVINCIAL HOSPITAL FOR THE INSANE. Halifax, N. S.

NOTICE.

☞ We are promised for our next No. a short Biographical sketch of the late REV. WM. COCHRAN, D. D., the first President of King's College, who was one of the earliest pioneers in the cause of Education in this Province, and still lives in the affectionate remembrance of many of his surviving pupils, now filling situations of eminence in these Provinces and other parts of the world.

The MAY number will contain an article on UNIVERSITY EDUCATION IN NOVA SCOTIA.