

FORT HENRY.



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Echoes from the Far Places.

COME with me and enter into my secret chamber, and I will show you the secrets of my heart—yea, with me thou shalt enter into the Holy of Holies where thou shalt see God as He is, and evermore be happy and at peace. So Spoke the voice of nature to me and obediently and with trustful heart I followed whithersoever she led me,

"Knowing that Nature never did betray
The heart that loved her."

I.

"I know a bank where the wild thyme blows,
Where oxlips and the nodding violet grows."

In the month of May we wandered through the green fields and farther still—into the heart of the leafy woods and as we quickened our footsteps we came, without anticipation of that which Nature had in store for us, to one of her sweet secret places.—Is there any joy like that of the discoverer? The pleasures that Nature has prepared for those who love her, are never old. Always in unexpected places, in spots that we had thought familiar, a peculiar and novel beauty peeps forth to reward the sympathetic heart. Violets had grown here and died alone, for even the little children never came to this secluded spot in their eager quest for spring flowers. So the violets had bloomed for the birds, whose nests in the thorns above overshadowed the little blue faces looking up to God and now we felt that they bloomed for us—for had we not found them? We gathered them and held the long stemmed beauties to our faces with long drawn breaths of pure delight and satisfaction and then we went away softly and told no one lest they should rob our bower of its charm.

II.

"Auf! bade, Schüler, unverdrossen
Die ird'sche Brust im Morgenrot."

The sweetest sound in all the world is that of the little birds as they waken first in the morning. Sometimes as you lie sleepless, when the blackness of night is over all and the grayness of dawn has not yet come, you hear a little rustle, which spreads and deepens as you listen, and from out the soft movings comes a sweet chirp that heralds the dawn. And then the birds begin to say "good morning," and the sound gains many voices and grows more confused.

Heard you ever of a Babel where only birds' notes were mingled? You may hear it for yourself any morning of June, in the foliage and evergreens that surround that country home and as you listen, the gray morning steals upon you unawares and away in the East the broad sun sends forth his crimson rays to tell you that another day is upon you. The soft light creeps into your eastern window as if the sun would not all at once overwhelm you with his majesty but sends you first the gray light of the dawn which changes softly to the redness of the morn and then to the glory of the day in its splendor.

III.

In our northern woods there grows a little waxen flower, as delicate in its structure and coloring as showiest orchid or purest lily. You take your way along the iron rails that connect this secluded, isolated country with the bustle and confusion of the city, you note the brown woods, the dull grass, the sluggish streams. The road is skirted by a barrier of old worm-eaten, time-worn rails. There is nothing to be seen of beauty or charm for the spring has not yet shown her beauties—they lie asleep beneath the sod—yet over in that brown wood with its layers of withered leaves lies a gem awaiting you: With gentle hand brush away the dead bare leaves and discover it—a little trailing flower, whose tendrils hug the brown earth, whose waxen petals give forth an exquisite fragrance that shall ever be associated with all things beautiful and sweet—the fragrance of the trailing arbutus. God did set his bow in the cloud but ever nearer and dearer are these sweetest of his messengers that charm the weary heart and make all things once more fresh and glorious as on that earliest dawn when first the morning stars sang together.

H. M. D., '05.

The Heroine of Cape Beale.

SINCE early morning the storm had gathered in fury, and by noon a perfect tempest of sleet and snow was driving along the coast. High up in the light-house tower of old Cape Beale, standing as sentinel guard on the sheer west of Vancouver Island, they watched its course, the keeper and his wife.

"It will be a bad night," Thomas Patterson said, peering through the narrow windows, out upon the storm-lashed sea. "The lamps must be trimmed early. They'll be needed to-night if ever they were."

"See!" cried Mrs. Patterson, "What awful blinding sleet there is over the water! Bring your glass and look!"

The keeper's practised eye swept the old Pacific. "It's rough," he announced calmly, though the furrow deepened in his brow. He moved the glass back and forth, fixing it finally on a spot near shore. For a moment he was silent, then, handing it to his wife, "Do you see anything strange near Devil's Rock?" he asked.

As she looked, a low cry broke from her lips,—**"A ship! They're in distress! There's a signal flying! They're on the rock!"**

Her husband seized the glass again, peering sharply through the storm, then dashing up the narrow stairs, he stood out on the wind-swept platform, focusing his glass on Devil's Rock, the treacherous foe of all sailors.

Unmistakeably the outlines of a small barque were visible, with the forms of men aboard working at the pumps. The wild signal of distress sounded faintly through the roar of wind and sea. With the certainty of the disaster there came home to Thomas Patterson the helplessness of his position, unable as he was to render any possible assistance to the seamen on that rocky coast.

His wife, wide-eyed with horror, waited at the foot of the stairs. Hearing the corroboration of her worst fears and realizing their utter inability to succor, she offered a fervent prayer that the Ruler of wind and of waves, in His infinite mercy, would somehow send relief.

Suddenly she started up. "The Quadra is at Banifield," she cried. "If we could only get her word!"

Mr. Patterson was pacing up and down. He wheeled around at the words. The "Quadra" was the Dominion government steamer, which he had thought far out of reach.

"At Banifield, is she? Perhaps we can get her by wire."

Hardly had he spoken when a terrific crash as of falling timbers smote upon their ears, followed by a sickening snap and dull whirl, unmistakable in their significance.

"The telegraph—the poles are down!" cried the keeper.

They rushed to the door. There a battered mass of timbers and wires, weighted with ice, verified their fears. As far as they could see, stretching off inland around Barclay Sound, was a long struggling wreckage of wires and poles, tangled and twisted shapelessly.

Mrs. Patterson turned to her husband in blank despair. "We're cut off from all help now," he said, "The telegraph and telephone wires are both down. There's no possible way of sending word to the Quadra."

A gust of wind whirled the door shut with a violence which threw them both backwards into the room.

They turned to the window again, fearing that the sudden squall had made an end of the poor seamen, but no, there they were in the midst of the awful uproar, specks of humanity, battling with the demoniac power of a tempestuous sea. They watched the seething waves, white-crested, on Devil's Rock, and the swaying ship, tossed like a feather from billow to billow, her crew working, working at the pumps, trying to ward off death, and still sending the signal for that relief which they dared hope would come.

Mrs. Patterson could stand it no longer. A sudden resolve born of her fervent prayer and her indomitable courage came to her.

"I will go myself. I will take the trail to Banifield and bring word to the Quadra."

In vain her husband pleaded. "You must stay with the lights," she said, "Many lives might be lost without them, and I could never manage them alone,

in this awful storm. You dare not leave! But I am free and there are a dozen lives in the balance."

The short winter afternoon was half-way spent when that dauntless woman started out on her perilous passage of four miles over a wellnigh impassable trail. Facing the icy swirl of wind and sleet, which cut into her face, and almost smothered her, threatened each moment by treacherous ice beneath, with the crash of falling trees around her and assailed by the horror of a night alone in that pathless forest, still she pressed on! On, through tangled underbrush, matted with crusted snow, which caught and threw her, bruising her face cruelly! On over fallen timbers which tore her clothing! On over monster rocks which almost defied a passage!

Sometimes she lost the trail and went tripping and crawling down the bye-paths into the darkness of the forest. Sometimes she had to go on hands and knees to make any headway at all, so blocked was the path, and once she slipped and lay half-stunned in a deep and black gully.

But above the roar of the storm she could hear voices calling, calling to her from out the wild waves—the cry of men battling for their lives and looking every moment for deliverance. Then she struggled up again and pressed forward blindly, pushing, clinging, stumbling, fighting every obstacle that strove to keep her back!

And at last, after four endless miles, bruised and numb, she came into the seaport town of Banifield, as the night was falling.

Captain Hackett, mackintosh and sou'-wester, pacing the deck of the *Quadra* at anchor in the harbor, and watching the progress of the gale out at sea, was the first to sight that wild, drenched woman's figure staggering down the slippery wharf past the swinging lights. With great difficulty a boat was lowered, which brought Mrs. Patterson on board and the Captain soon learned her gasped-out sentences that she had come so far to tell.

The *Quadra* had steam up and in response to the appeal, Captain Hackett ran his vessel into the teeth of the gale, reached the stranded ship in time and rescued every man of the crew.

There were ten of them, including Captain Allison, on that little barque *Colonia*, lumber-laden, sailing from Everett to Sandiago and wrecked on Devil's Rock. Their sails were sheeted with ice, their rigging torn down, and they had sprung a-leak, foundering on the rock, when running before the wind to escape a heavy cross sea. When the *Quadra* reached them, they were on the point of yielding themselves to the angry waves, too far spent to struggle longer.

Taken on board they heard the story of their wonderful deliverance, brought about by a woman who had come through awful perils, counting her life as nothing that she might rescue them—who now lay exhausted in the cabin of the ship.

No medal was struck in commemoration of Mrs. Patterson's dauntless passage, no government award was made to her, no long-lost brother stepped forth from the rescued crew to reward her supreme devotion. But when the

plaudits of the daily papers had ceased to sound, and she was once more busied in the common routine of the light-house duties, happy in the success of her brave undertaking, she would often recall that hour in the ship's cabin. She would see those grizzled seamen, whom she had saved, file in to look at her, to speak a muffled word, or touch her hand—slight tributes these had been, of a gratitude words could not fathom.

But her best reward she would never know—the humbled, thankful lives of the seamen and all those other nameless ones, helpless and bereaved but for her heroism, a heroism so whole-souled that no thought of self had entered into it, a courage so large that it could look beyond the bounds of life, a sacrifice so complete that it could wrest the lives of men from the very jaws of death.

LILIAN VAUX MACKINNON, (M.A. '03).

Halifax, N. S.

Macbeth.

ACT II, SCENE I.

“Une salle du château de Macbeth.”

Macbeth—Est-ce un poignard que je vois là devant moi, la poignée tournée vers ma main? Viens que je te saisisse. (Il avance la main et ne saisit qu'une ombre.) Tu m'échappes, et cependant je te vois toujours. Fatale vision! n'es-tu pas sensible pour toucher comme tu l'es pour voir? ou n'es-tu qu'une illusion vaine produite par un cerveau échauffé? Pourtant je te vois, et sous une forme aussi palpable que cette arme que je tire en ce moment de son fourreau. (Il tire son poignard.) Tu me précèdes dans le chemin que j'allais suivre, et tu m'offres un instrument pareil à celui dont j'avais dessein de me servir. Mes yeux seuls sont abusés d'une erreur que mes autres sens ne partagent point; ou, si mes yeux voient la vérité, ils valent seuls tous mes autres sens. Tu es toujours présent à mes regards, et sur ta lame affilée j'aperçois des gouttes de sang que je n'y avais pas vues d'abord. Ce n'est rien de réel. C'est mon projet sanguinaire qui peint cette vaine image à mes yeux déçus. Maintenant, sur la moitié du globe, la nature semble morte, et des songes funestes troublent le sommeil des mortels. Maintenant les sorciers payent à la pâle Hécate leur culte et leurs offrandes nocturnes. Voici l'heure où l'assassin, au teint hâve et flétri, s'éveille aux hurlements du loup, sentinelle dont il reçoit le signal, comme autrefois le ravisseur Tarquin, marchant à pas allongés, en silence et d'un pied suspendu, il s'avance vers son crime comme un fantôme dans les ténèbres. O toi, terre solide et ferme, sois sourde à mes pas, ignore la route que je prends; que les pierres n'aillent pas révéler où je suis et me ravir l'exécution de ce forfait, tout prêt à ce moment favorable et si bien fait pour lui! Tandis que je menace, il vit. On est trop froid quand on s'amuse à parler dans la chaleur de l'action. (Lady Macbeth donne le signal

convenu par un coup de cloche.). J'y vais. C'en est fait; la cloche m'invite. Duncan, n'entends pas ses sons; car c'est ta cloche funèbre qui t'appelle au sein des cieux ou au sein des enfers. (Exit.)

SCENE II.

(*Lady Macbeth, seule et dans la nuit, venant vers Macbeth.*)

Lady Macbeth—La liqueur qui les a enivrés n'a fait que me donner plus d'audace; ce qui a glacé leurs sens m'a rempli de flamme. Écoutons! silence! C'est le cri de la chouette, héraut sinistre, qui annonce le plus atroce adieu nocturne. (Elle s'avance vers l'appartement du roi.) Il est à son ouvrage. Oui, la porte est ouverte, et les chambellans, ensevelis dans l'ivresse, dorment d'un sommeil bruyant qui semble insulter au devoir de leurs offices. J'ai mêlé dans leur boisson des drogues si assoupissantes qu'on ne peut savoir s'ils respirent ou s'ils expirent.

Macbeth—(S'avançant vers elle.)—Qui est là? Parle!

Lady Macbeth (à part.)—Hélas! Je tremble qu'ils ne se soient éveillés, et que l'acte ne soit pas consommée. Ce n'est pas le coup frappé qui nous perd, c'est de l'avoir tenté sans l'achever. Écoutons! J'avais pourtant disposé leurs poignards de façon qu'il ne pouvait pas s'y méprendre. Ah! s'il ne m'eût pas offert les traits de mon père endormi. J'aurais frappé, moi. (Macbeth vient à elle) Ah! cher époux!

Macbeth—J'ai frappé le coup. N'as-tu pas entendu le bruit?

Lady Macbeth—J'ai entendu la chouette et le murmure des insectes des foyers. N'as-tu pas parlé?

Macbeth—Quand?

Lady Macbeth—Tout à l'heure.

Macbeth—Comme je descendais?

Lady Macbeth—Oui.

Macbeth—Écoute! Qui couche dans la seconde chambre?

Lady Macbeth—Donalbain.

Macbeth (regardant ses mains sanglantes)—C'est là une triste vue!

Lady Macbeth—Triste vue? Folle pensée!

Macbeth—Un des chambellans a ri dans son sommeil, et l'autre a crié "Au meurtre!" Ils se sont éveillés l'un l'autre. Je me suis arrêté pour les entendre, mais ils ont dit quelques prières et sont retombés dans le sommeil.

Lady Macbeth—Ils sont tous deux logés dans la même chambre.

Macbeth—L'un s'est écrié, "Dieu nous assiste!" "Ainsi soit-il" a dit l'autre, lorsqu'ils m'ont vu passer avec ces mains de bourreau. J'ai prêté l'oreille à leur frayeur, et n'ai pu dire avec eux; "Ainsi soit-il," lorsqu'ils disaient, "Dieu nous assiste!"

Lady Macbeth—N'approfondissez pas tout cette idée.

Macbeth—Mais pourquoi ne m'a-il pas été possible de prononcer ces mots, "Ainsi soit-il." J'avais le plus besoins des bénédictions du ciel, et le mot, "Ainsi soit-il," s'attachait à mon gosier et n'a pu sortir de ma bouche.

Lady Macbeth—Ce n'est pas sous cette face qu'il faut considérer ces sortes d'actions, autrement elles nous feraient perdre la raison.

Macbeth—Il me semble avoir oui une voix qui me criait : "Tu ne dormiras plus ! Macbeth tue le sommeil, le sommeil de l'innocence, le doux sommeil qui efface dans le cerveau les traces douloureuses des soucis qui chaque jour fait renaître l'homme à la vie ; ce bain qui rafraîchit le corps épuisé de fatigue, ce baume qui guérit les âmes blessés et souffrantes, ce second agent de la puissante nature qui répare et renouvelle les sens pour les jouissances du banquet."

Lady Macbeth—Que voulez-vous dire ?

Macbeth—Elles criaient toujours : "Plus de sommeil dans toute la maison. Glamis a assassiné le sommeil et Cawdor ne dormira plus ; Macbeth ne dormira plus !"

Lady Macbeth—Quelle était donc cette voix qui criait ainsi ? Eh ! pourquoi, brave thane, votre noble courage s'abaisse-t-il à forger ces visions dans votre cerveau malade. Allez, prenez de l'eau et lavez cette tache qui souille vos mains ; ce serait un témoin. Pourquoi avez vous ôté les poignards où je les avais posés ? Il faut qu'ils restent. Allez, reportez-les, et souillez de sang les deux chambellans endormis.

Macbeth—Moi, je ne veux plus y rentrer ; je suis effrayé en songeant à ce que j'ai fait. Y regarder encore une fois ! Je n'ose.

Lady Macbeth—O homme faible dans ses résolutions ! Donnez-moi ces poignards. Les hommes endormis et les hommes morts ne sont que de vaines peintures, et c'est à la crédule enfance qu'il est permis de s'épouvanter d'un démon peint sur la toile. Si le sang de Duncan coule encore, j'en prendrai pour en rougir la face des deux chambellans, car il faut absolument qu'ils paraissent être les coupables. (Elle sort. On frappe à la porte du château.)

Macbeth (Reste seul et effrayé.)—Qui frappe ainsi ? Que suis-je donc devenu ? Ah ! quelles mains j'ai là ! Elles m'aveuglent d'horreur. L'océan entier pourra-t-il laver ce sang et blanchir mes mains ? Non, elles souilleraient l'océan et rougiraient ses ondes des taches de mon forfait.

Lady Macbeth (Elle revient.)—Vois, mes mains sont de la couleur des tiennes, mais je rougis de porter un cœur si blanc et si pur. J'entends frapper à la porte du midi. Retirons-nous dans notre chambre ; quelques gouttes d'eau vont nous laver de cette action. Vois combien cela est aisé. Ah ! Macbeth ton courage t'a abandonné en chemin. Écoutons ! on frappe encore plus fort. Prends ta robe de nuit de crainte que ce ne soit nous qu'on demande ; il ne faut pas qu'on nous supprime éveillés et debout à cette heure. Allons ! Macbeth, ne reste pas ainsi misérablement perdu dans tes réflexions.

Macbeth—Plutôt que de connaître mon forfait, je voudrais ne plus me connaître moi-même. Duncan, réveille-toi à ce bruit. Plût au ciel que tu le fusses encore ! (Ils se retirent tous deux.)

Traduit par,

G. A. BRUNET.

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Editorials.

PROBLEMS OF FORESTRY.

ON Saturday, February 29, *The Globe* published a number devoted to a discussion of forestry problems, and facts of the pulpwood industry in Canada. The importance of this special number as an educator of public opinion on the matter of forest preservation can scarcely be overated. All the articles of the literary section picture clearly the disastrous depletion of forests which is in progress. There can be no doubt that with a moderate increase in demand, domestic and foreign, our areas of spruce and pulpwood timber will be exhausted before many generations have passed away.

Facts taken from authoritative sources further indicate that large quantities of pulpwood from Canadian forests are being exported to United States where the approaching exhaustion of supplies of raw material has set lumbermen looking for new sources from which the deficiency may be met. As a means for safeguarding our forests, export must be prohibited or restricted. This would not only prevent rapid depletion but would involve an extension of the pulpwood and paper industries in Canada.

But in addition to negative means of husbanding supplies of lumber, positive measures are necessary if the future demands of Canadian manufacturers are to be fully met from domestic sources. Reforestation must be undertaken on scientific principles. A school of trained foresters must be developed and clothed with power to undertake at government expense the task of maintaining our forest areas. *The Globe* through its special number of the 29th will do much to awaken public interest in questions of forestry and forest preservation.

THE INEVITABILITY OF AMERICA'S FUTURE.

Visitors to United States are always struck with the optimism of the people of that country. The average citizen of the United States is proud of his native land, proud of its social life, its form of government, its institutions, its incomparable wealth and the certainty of its future. And this pride of the

American citizen is not hidden. It is proclaimed from public places, from the platform, from the editorial sanctum, even from the street corner. The orators of United States have in the greatness of their country at present and the inevitability of its future a theme of boundless possibilities. With an unreasoning patriotism that is given some color by the facts on which it is based, they may talk vaguely of unparalleled natural resources, incalculable extent of territory, an expanding trade, a growing population, an unequalled industrial activity, the unexampled prosperity of all classes, the equality of opportunity for all individuals, the advantages of a Democratic form of government and an inviolable constitution to maintain an undying liberty—and a tremendous, unthinkable future. Thoughts of the future sends a glow through the American citizen. There can be no doubt that United States will grow from more to more, changing the imperfections of the constitution, growing in wealth and prosperity, becoming larger and larger. Not even the humblest citizen of the land lacks this confidence in its future. All classes are pervaded by it. Capitalist and laborer, high and low, wipe out their antagonisms when the future is discussed. New York is to outstrip London; immense mechanical feats are to be achieved, a tunnel here, a bridge there; new railways, subways, skyscrapers and all the other material features of civilization are to come in profusion. When the American citizen contemplates the future of his country he becomes awe-stricken: and not infrequently falls into a meaningless, vulgar boasting, in which material wellbeing entirely overshadows all other considerations. To one not acquainted with American idiosyncrasies in respect of the future it is the assumed inevitability of its greatness that appears remarkable. There is no room for doubt or question. The thing simply must be. Of the present what can possibly come but a wonderful future. It is the assumption of the certainty of a great future for his native land that constitutes the optimism of the American citizen. The tendency to boasting is odious in all instances. Concentrated attention on material things is dangerous to the highest features of civilization. But it cannot be denied that despite serious shortcomings in the social and industrial life of his country the American has sound reason for pride. And who can estimate the value as a national asset of confidence in the future?

MR. MULLOY AND OXFORD.

It may be safely assumed that the majority of Journal readers have heard of Trooper Mulloy, the Canadian soldier, who lost the use of his eyes through injury received while on service in South Africa. Upon his return from the war, Mr. Mulloy urged on to greater effort by the calamity which had befallen him, entered Queen's for an Arts course. At the end of four years attendance at the University, Mr. Mulloy received his degree. He overcame tremendous obstacles in the pursuit of his studies. No difficulty was great enough to discourage him or induce him to relinquish his purpose of obtaining such an education as would relieve him of the necessity of life-long dependence on friends. The sorrow and despair that settle down on those who find themselves suddenly

deprived of the power of seeing, Mr. Mulloy fought away with characteristic heroism, and before his course at Queen's was completed proved that the tremendous calamity to which he had been subject had not bereft him of the power of mind. At college Mr. Mulloy was an earnest and industrious student.

For the benefit of those who suffered injury in the South African War a Patriotic Fund was established. From that source assistance is rendered the relatives of the soldiers who were killed in the war. To those who survived the service in South Africa but are incapacitated by injury sustained, pecuniary aid is also extended.

It is now Mr. Mulloy's desire to further overcome the handicap under which he lives by a post-graduate course at Oxford. His personal means will not permit him to meet unassisted the expense of study abroad. In such a contingency the Patriotic Fund might be drawn upon as a source of revenue. But the fund is so diminished as to require augmentation to meet this purpose, which is, moreover, somewhat outside the ordinary uses to which it is put. It is proposed, therefore, to ask for special contributions to the Patriotic Fund to meet the expenses of Mr. Mulloy at Oxford.

It is the conviction of the Journal that at Queen's, where Mr. Mulloy is well-known and highly esteemed, some organized action should be taken to collect a sum of money to be contributed to the Patriotic Fund.

THE GERMAN PLAY.

Adverse conditions do not affect German enthusiasts, if one is to judge by the size of the crowd in Convocation Hall last Friday evening, for, in spite of the storm and the counter-attraction of a final senior hockey match, the annual entertainment of the Students' German Club drew a good audience.

An interesting program preceded the main performance: Miss D. Chown's piano number, Schubert's "Impromptu," formed a suitable introduction, while Miss G. Lachance gave an intelligent rendering of Von Platen's ballad, "Das Grab im Busento," and the vocal solo "Allein" (Storch), sung by Mr. W. D. Lowe, received merited applause.

The chief source of interest in the program, however, was the presentation of Benedix's little comedy "Die Herrschaft," by student performers. The play was replete with amusing situations and the outcome of the various complications in the plot was attended with great interest by the audience. The cast was well balanced and it would be difficult to specify as to the comparative ability of the performers. In the role of "Klärcher," the niece and guest of Fräulein von Ralling, Miss Ada F. Chown succeeded in portraying very skilfully the alternating joy and sorrow in the life of this winsome "poor relation." Miss Hughes as "Lenore" gave a realistic presentation of the enraged fiancé, while the part of the demure, home-keeping Fräulein Margarete was well played by Miss M. Shortt. Mr. Otto put a great deal of life into the play by his energetic acting in the part of Ludwig Baum, the enterprising young lawyer, and his interpretation found much favor among the spectators.

This high order of merit was maintained by the work of Mr. Hanna in the role of "Herr von Ralling" and of Mr. J. Edwards as Elsner, the faithful officer. Miss Marshall as "Lisette," Mr. Foley as the "Barbier," and Mr. Baird as "Frisem," proved quite capable supporting members of the caste.

After the play, Miss D. Chown gave another masterly piano selection, and Goethe's Mignon Lied was sung very expressively by Miss M. Knight. This brought to a close an entertainment which is a credit to the ambition of the German students and with which the audience was perfectly satisfied.

Editorial Notes.

We are nearing the end of our labors. Any sacrifices made on behalf of the Journal we count as nothing if they have been the means of betterment of student life.

The Canadian Senate smarting under the criticisms heaped upon it, has lately shaken itself free from lethargy and entered with surprising zest on a discussion of the value of a second-chamber. It is nice that a body so august as our Senate should treat the public to profound utterances on an academic subject. Will public opinion not support total abolition of an instrument of legislation that has become obsolete?

Arts.

THE annual meeting of the Dramatic Club which was held on the 9th inst., revealed a most prosperous condition of affairs. Receipts for the year amounted to \$260.25 of which \$13.24 remains as a balance on hand. There is a keen interest manifested in the Club by all the members and plans for next year's work are already under consideration. It has been decided that the play which will be presented next fall will be Shakespeare's "Two Gentlemen of Verona," and, in order to ensure an adequate training period, it is proposed to change the constitution so that the first meeting of the Club will be held two weeks after the opening of college.

That the talent displayed in the plays put on by the Club has attracted considerable attention from outside quarters is shown by the proposal of Mr. W. H. Compton which is now before the society. Mr. Compton requires about a dozen members of the Dramatic Club to assist him in playing Dicken's "Christmas Carol," which is to be presented in Ottawa under the patronage of the Governor General shortly after Easter. They will play two nights at Ottawa and one each at Cornwall and Brockville, after which the production will be given in Kingston for the benefit of the Dramatic Club. If the venture proves a success financially the larger towns and cities of Western Ontario may be toured.

The following officers for next year were elected by acclamation: hon. pres., Prof. Cappon; sec., G. N. Urie; business manager, J. G. McCammon, committee, Misses. M. Marshall, W. Girdler, and Messrs. G. W. Ritchie and the defeated candidate for the presidency. The nominees for president are Messrs. F. H. Huff and P. T. Pilkey, and for vice-president, Misses Ada Chown and Jean Campbell.

It is a matter of regret that the Political Science and Debating Club has not been the centre of such live interest this college year as it was last. The reason for this decline in interest is not far to seek. Obviously it is to be found in the fewness of the number of meetings the club has held. According to the programme issued at the beginning of last term there were to be five addresses delivered by prominent men from outside the University and eight addresses and debates were to be given by students, but only one of the former and four of the latter have actually taken place.

The executive have done their best to have the programme carried out as originally planned but unfortunately their efforts have not been supported as they should have been by all the students who signified their intention to take part in the debates. No one should promise to participate in a debate if not sure of being able to carry out his part at the appointed time; for when a postponement is made the later debates have to be held so late in the term that the pressure of work, as the spring examinations approach, makes it necessary to cancel them. To provide against this curtailing of the programme it might be well for the officers of next year to consider the advisability of holding several debates before Christmas so as to have all the debates finished by the end of January.

One commendable departure has been made by the Club this year in its encouragement of informal discussion on the subjects treated by the debaters or speakers. Discussion of this kind, is in many respects, much more valuable as a training in public speaking than the delivery of prepared speeches. It inspires self-confidence and gives valuable training in the art of thinking on one's feet; and to give its members such training should be, after all, the chief aim of every debating organization.

The annual meeting of the Arts Society was held on Feb. 25th. The treasurer's report showed a balance on hand of \$198.16, but a considerable number of bills have yet to be paid out of this amount so that the surplus for the year will amount approximately to \$100. The Board of Curators for the Reading Room reported an expenditure of \$174.20 while the receipts were \$148.25. The fines imposed by the Concurus, after deducting expenses, amounted to \$3.66.

The following Board of Curators was recommended for the ensuing year: J. A. Shaver (chairman), A. Rintoul, M. Colquhoun, M. J. Patton, E. B. Wiley, A. W. Gordon, P. L. Jull.

The following officers for next year have been elected by the Philosophical Society: hon. president, Prof. Morison; president J. A. McQuarry; vice-president, R. H. Somerville; sec.-treasurer, A. A. Laing.

NEWS NOTES.

At the meeting of the Y.M.C.A. on March 6th the question of abolishing the fixed annual fee was discussed. There seemed to be a consensus of opinion that it would be advisable to abolish the fee and to depend entirely upon voluntary subscriptions. A motion which will, no doubt, be approved, will shortly be introduced to effect the proposed change.

The increased interest in the study of art in the University is shown by the action of the Arts Society in deciding to purchase the painting, "A Harvest Scene in the Yedo Valley," by Y. King. The cost is \$101.

One of the most interesting meetings that the Philosophical Society have had this year was held on Feb. 24th, when Professor Dyde spoke on "What is Imagination?" After considering the views of philosophers and eminent thinkers on the nature of imagination the speaker gave an account of a number of experiments performed upon a child, and from a consideration of the results of these brought out the essential characteristics of the imagination.

Mr. M. N. Omond, the newly appointed general secretary of the Y. M. C. A. has assumed the duties of his office and will be at the service of students who wish to consult him. He will be in his room in the Old Arts building from two o'clock to four every afternoon.

The Faculty of Education have declined to enter the Arts Society. The final year, profiting by the experience of '07, have decided not to publish a year book. A group picture will take the place of the more costly year biography.

The Arts department in the next issue of the Journal will be in charge of Mr. C. W. Livingstone.

Divinity.

A DAY or two ago our Scribe received a challenge from the final year in Science to play a game of hockey. It was a matter of deep regret to the members of the Hall that it was not possible to accept the challenge. Of course the fault did not lie with us, we were willing, eager and anxious to go forth in the spirit of our forefathers and wipe the ice with the men of Science, but the great trouble was that the challenge came when there was no ice.

Past records show that since the days of Curtis, Divinities have been noted for their skill and speed in chasing the puck. The cunning, guile and natural depravity of the final year in Science in sending a challenge to play hockey at such a late date are plainly evident.

The annual meeting of the Q.U.M.A. was held Saturday, March 14th. The reports received from the different officers went to show that on the whole the work of the Association had been most successful during the past year. The election of officers resulted as follows:—hon. pres., Rev. A. Gandier, M.A., of St. James' Square Church, Toronto; pres., R. J. MacDonald; vice-pres., P. G. Macpherson; treasurer, W. W. Kennedy; financial secretary, P. E. Pilkey; cor. sec., A. P. Menzies; recording sec., W. Dobson; Alumni sec., W. Stott; critic, J. L. Nicol; reporter, R. M. MacTavish; librarian, Mr. Scott; convener of Home Mission Committee, Miss Nesbit; convener of Foreign Mission Committee, Miss Robertson; convener, of Membership Committee, A. Donnel. In addition to its foreign mission work the Association has charge of four home mission fields. Mr. Jull goes to the Arcola presbytery, Sask., Mr. J. L. Nicol to Collin's Inlet, Algoma; Mr. A. Rintoul to Key Harbour, North Bay, and the Society is still looking for a man for Tomstown, a New Ontario field.

In two or three weeks from now a number of our men will be leaving to take up work on the mission fields of the West and New Ontario. To some of them it will be a new experience. It is not the intention of the Divinity editor to preach to the fellows, but a word or two will not be amiss. To the student-missionary it will be given in a peculiar sense to bring to men and women the most powerful influences and the most tender truths they will know. The task to which he has pledged himself is the development of Christian personality in his own life and in the life of others. The great inspiration of his work is that it deals with life in the fullest and deepest sense. In speaking to one of our men the other day he said that he feared the ministry for it tended to narrow our outlook upon life. There is no reason why that should be so. A minister need not be a fossil. Christianity means enlargement, the life more abundant. The makers of Christian personality in others must themselves be made. Personality alone can reveal personality, hence Christ reveals to us God in such a way that we become eternally loyal to Him and spiritually moulded by Him. The church's ideals need enlargement. It is a small quantity in her life and thought. She has need to find Him, and is He not found through the lives and faithful service of men. In this a large responsibility rests on the student-missionary. We wish him every success in his work.

Ladies.

WHAT a radical change a few weeks has brought! Where is all the gay yellow, red and blue which floated about the halls and not a few of the class-rooms where "bright the light shone o'er fair women and brave men," and Grant Hall "was the scene of revelry by night" Grant Hall! The doors are closed. One feels sure that even a whisper would wake startling echoes. And from the hushed and awesome silence of the halls and class-rooms, one wonders if the college colors is ought but a somber black. And the Red room! You always did think it was pretty and homey. It was an inspiration and a pleasure to study there. If in October you needed to be reminded occasionally that "talking is strictly forbidden in the reading room," quite useless is the notice now. Your friend gets up and walks out with such a hopeless expression on her face that you go out softly after her and say comfortingly "of course, I know you are not going to get a single class off, but for the sake of the institution's reputation and your friends' health look on the bright side of things." You wonder after what the latter is and justify yourself when you remember that it is the sun rise and the moon set. Silence! Desertion! Even in the Levana sanctum! What aeons since the laughter and frolic of the Freshette's reception, but you remember it as you associated the atmosphere with the polar bear. On the cosy, your friend, with knitted brows, grinds at German. Behind the screens, you come upon another, but she doesn't even notice you. She is deep in Moral Phil. Dust has gathered upon the *new* couch. The magazine table feels slighted, the "Daily Globe" highly flattered because all the hurry and worry and flurry cannot dispel the charms of the teachers' wanted column.

But greatest of all is the woe of '08. You haven't yet decided whether the members of that illustrious year are dying *by* degrees or *for* degrees, but here inscribe in favor of the latter their epitaph:

I asked not wealth, nor power, nor fame:
My wants were very few:
Just two letters to my name
And a bit of sheepskin too.

"Think, could we penetrate by any drug,
And bathe the wearied soul and worried flesh,
And keep it clear and fair by three days' sleep!"

Does anyone know if Browning ever studied for a Moral Phil exam?

"I am sorry indeed that I have no Greek, but I should be sorrier still if I were dead; nor do I know the name of that branch of knowledge which is worth acquiring at the price of a brain fever. There are many sordid tragedies

in the life of the student, above all if he be poor, or drunken, or both; but nothing more moves a wise man's pity than the case of the lad who is in too much hurry to be learned.—R. L. S.

The last regular meeting of the Levana Society for the year '07-'08 was held Wednesday, March 11th. The year poem was read by the poetess, Miss Fargey, who has certainly found inspiration some where, even though it is March. But a letter stated that the prophetess-historian would be unable to "reveal the future state of bliss and happiness" waiting for members of the executive and the final year girls. The sum of twenty-eight dollars was voted for a new couch for the Levana room. Some new sofa pillows were also to be purchased. Debaters in future years will be given ten and seven minutes instead of seven and five, as formerly.

After the business meeting and the programme, the results of the Levana elections which had been held that day were announced and were as follows: hon. pres., Mrs. Dyde; pres., Miss Thomas; vice pres., Miss Anna Stewart; sec., Miss Hudson; treas., Miss Macallister; prof. historian, Miss Ross; poetess, Miss Marshall; sr. curator, Miss L. Phillips; critic, Miss Muir; directress of Glee Club, Miss Hague; convener Athletic Committee, Miss Pannell; convener Program Committee, Miss May McDonell.

The new president and secretary were then installed, and the books closed for another year. "E'en so, it is so!" And, 'tis thus:

"The old order changeth, yielding place to new."

A WOMAN STUDENT IN PARIS.

A chance intimation that a lady graduate of Queen's was at present studying French in Paris has suggested mental pictures of the interest and fascination of thus studying French literature at its fountain-head, and has led to the selection of this subject for a short article.

Paris throws over it's visitors a fascinating spell, differing according to the differences of their receptivity. Though by no means an ideal city, with all it's beauty and antiquity, it is certainly a *city of ideals*. Its modern history appears one long pursuit of ever-changing ideals, as to government, at least, never succeeding in finding the impossible perfect ideal, though its republican form has now had a long and steady lease of power, and its public buildings, including the venerable *Notre Dame*, still bear the graven inscription "*Liberté Eglise Fraternité*."

But the University of Paris, like *Notre Dame*, with its quaint carvings, has kept its place and influence unshaken through all the struggles that have raged throughout its seven centuries of existence. And it is proudly claimed by one of its modern historians that, with all the defects of its middle age, "elle n'a pas moins enseigné à la France à penser et à régner sur l'Europe par la pensée,—domé en fin à la royauté la force nécessaire pour renverser l'aristocratie, et à la nation la force indispensable pour renverser la royauté!" Yet

notwithstanding its preservation of place and prestige, its internal history also has been one of revolution, and it has not been uninfluenced by some outward ones. The first Napoleon desired to re-mould it after his own arbitrary fashion into a semi-military institution, "something between a barrack and a convent." And, in its modern progress during the last half century philosophical, historical and literary studies have had some trouble in breaking through the too rigid system of Latinity which has given to the vicinity of the University the name of the "Latin Quarter."

The modern University includes six departments: Letters, Science, Law, Medicine, Pharmacy and Protestant Theology. The last item may seem strange, but it must be remembered that the Sarbonne has been the grand theological school of the Roman Catholic church from the middle ages—the "oracle of scholastic theology." And the Sarbonne forms part of the University of Paris. Its buildings, the most ancient and imposing, stand side by side with those of the College of France, and some courses of study are duplicated. The College of the Sarbonne was founded about 1230 by one Robert de Sarbon who was a canon and a chaplain of the idealized King, St. Louis. It was at first only a humble name for a few doctors in theology and poor students. Its present stately mass of buildings was begun by order of Cardinal Richelieu, himself a doctor of the Sarbonne. He laid the foundation stone of its superb church in 1635 and it contains his tomb.

But the new Sarbonne, as an institution, is quite different in character from the ancient one. Its courses of lectures include many of the most eminent names in science, literature and philosophy, and brilliant improvisations are often given in the lecture-rooms to which strangers may be admitted. In an illustrated article in Harper's Magazine for February may be found interesting glimpses of its quadrangle class-rooms and the great fresco paintings by modern masters of that art which adorn the walls, reproducing the figures of Pascal, Descartes, Gizat and others, whose voices have been long silent.

One of these illustrations (at the botanical laboratory) will show the casual reader that women students take their place side by side with the men. They come and go, sitting at lectures and working in laboratories together in as free and matter-of-course a way as if they were listening to a concert or working together in an office or factory. And there is no reason why any self-respecting young woman should not avail herself, if she will, of any advantages this great University can offer. The main thoroughfares of Paris are orderly enough, and she does not need to venture into doubtful localities. There are many respectable, quiet pensions where a young woman possessing sense and personal dignity can live comfortable and safely at about five francs (one dollar) per day. In case this should not include luncheon, which at pensions, is a sort of early dinner, a very fair luncheon can be had at some of the quieter restaurants which about in the Boulevard St. Germain where students congregate for a franc or less if tastes are moderate.

There are, of course, French Protestant as well as English Protestant churches. That at the old Oratoire, near the Louvre, is central and easily found, and one is reasonably sure of hearing there a good sermon. So indeed

one may be as sure in Notre Dame, and the writer has heard in the same day sermons in these two churches, each of which might have been appropriately preached in the other.

Then if space permitted, it would be easy to enlarge at length in the abounding interest of the monuments of history, wherever one may turn: or the beauty of the parks and palaces, the wonders of the Louvre, and other the beauty of the parks and palaces, the wonders of the Louvre and other galleries, and the charming environs of the city. Possibly these manifold distractions are almost too great for persistence in quiet study. But, after all, we should absorb real culture as much from what we see and hear as from volumes we "grind" at, provided only we have eyes to see and ears to hear. If one has not, and is without the mental and moral power to "find sermons in stones," even Paris may prove "flat, stale and unprofitable" or even worse.

FIDELIS.

Science.

ON the 28th February the Engineering Society was favored by an address from Mr. H. E. T. Haultain, general manager of the Canada Corundum Co. To the student about to enter on the practice of a profession, the biography of a successful man in that profession is always a subject of interest. Mr. Haultain can easily be classed among our successful mining engineers, and for a brief account of his twenty years' experience in mining we would refer the reader to the Canadian Mining Journal of February 1. Suffice it to mention here that he has held responsible positions on three continents and is a leading authority on the mechanical and lixiviation treatment of ores, his most recent achievement in this line being the devising of a method for the concentration of the Craigmont corundum.

The lecture, which was entitled "Compromise," was really a discussion on the conditions that the college graduate meets on entering the practice of his profession. Referring to the gap between the problems of the school and those of the practical world the speaker said that this gap varied in width according to the particular branch of science followed. As for assaying, surveying or milling the school should fit men to enter almost at once on these and undertake responsible work, but the practice of mining or railway engineering was so much beset with local conditions that only a trained judgment could deal with these. These conditions are so varied that they could not be included in a college course, neither could the problems connected with management, such as labor or finance. He thought that the college should endeavor to equip the student as far as possible for practical work by teaching processes as well as principles.

The speaker deplored the fact that some graduates finding themselves surrounded by a multitude of local conditions are apt to regard their college course as useless and they do not recognize the part it has taken in preparing them to solve their practical problems. He also pointed out that as life goes on

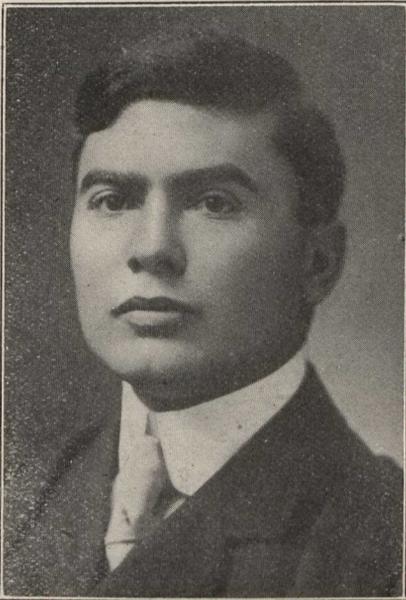
engineers often find themselves drifting away from the actual practice of their profession and dealing more with men and affairs. He thought that original research lost much on this account. In conclusion, he urged the creation of a high standard of etiquette in the engineering profession, such as prevailed in medicine or law, and remarked that the Canadian student had a tendency to honesty that was appreciated in the United States, where, we would infer, that tendency does not exist.

PERSONALS.

Mr. Allen Findlay has passed his final examination for a D.L.S. and is now entitled to these letters.

Mr. G. M. McKenzie is a welcome visitor to the institution. He is at present engaged in writing a report on iron ore deposits of Ontario.

Messrs. C. D. Brown and K. C. Cummings passed their preliminary D.L.S. examinations in Ottawa.



MR. T. H. HOGG.

Dr. and Mrs. Goodwin have invited the final year in Science to dinner on Wednesday evening, the 18th.

We publish in this number of the Journal a photograph of Mr. T. H. Hogg, President of the Engineering Society of the University of Toronto. Mr. Hogg is a most energetic and capable gentleman and is largely responsible for the advancing of his society to the high recognition which it deserves.

We offer our sincere sympathies to Mr. W. M. Harding, who is sadly bereaved by the loss of his sister, who died in Calgary, Alta., on March 12th.

We are very sorry to learn that Mr. G. J. McKay, B.Sc., was called home by the sad news of his mother's death. We extend sympathies to Mr. McKay.

Quite a number of the "Machers" were in Ottawa for the meeting of the Canadian Mining Institute.

Mr. R. O. Swezey, president of the Engineering Society, was in Ottawa for the Royal Military College Club banquet at the Russell House on Saturday, the 7th March, and has expressed himself as having had a most enjoyable time. He was called upon to speak, and made a few brief remarks.

Mr. Coutlee, president of the R.M. C. Club, and Lt-Col. Würtele, the secretary, entertained Mr. Swezey before and after the banquet.

We note with satisfaction that Prof. W. G. Miller has been elected president of the Canadian Mining Institute.

The Baker Rotary Engine Valve.*(Written for "Power.")*

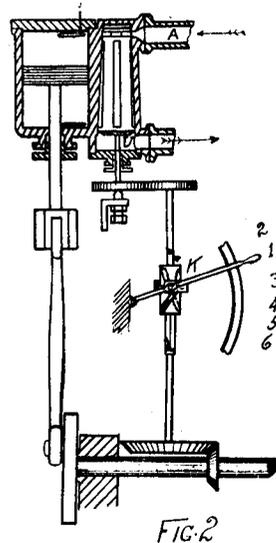
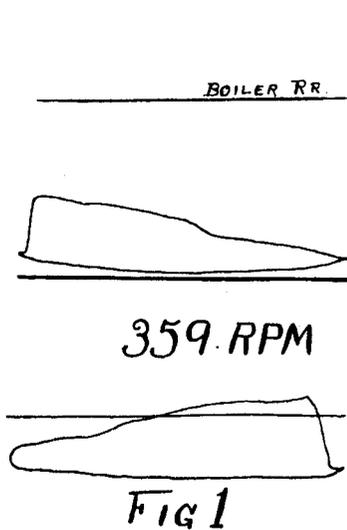
In the design of engine valves the need has long been felt of a simple valve that is inherently counterbalanced and in whose design the events, admission, cut-off, release and compression are independently located, which is not the case with slide valves.

In the past few years the tendency in engine design has been decidedly towards "quick revolution" engines. The increased efficiency of these engines is mainly on account of reducing the serious losses due to condensation on the cylinder walls, found in slow turning engines, and also to the great reduction in the size of the engine of a given horse power.

Quick revolution engines are highly efficient in spite of the fact that they cannot use Corliss type valves. Quick revolution does not imply high piston speed as the piston speed varies with the length of stroke.

A striking fact is that one of the best engines built to-day (The Belliss Morcum Quick Revolution Engine) uses throttle governing.

A perusal of the following indicator cards, Fig. 1, recently taken on test by students of Queen's University, Kingston, Can., on a compound Belliss Morcum



engine, running at a high efficiency will show what could be done if a more ideal indicator card could be produced at this high rotative speed. These particular cards were taken on light load when the engine was developing about 35 horse power. The boiler pressure line shows the heavy throttling. When this engine is running on full load it delivers about 225 horse power.

The above suggested requirements are fulfilled to a remarkable degree by the Baker rotary valve, of which the following is a description:

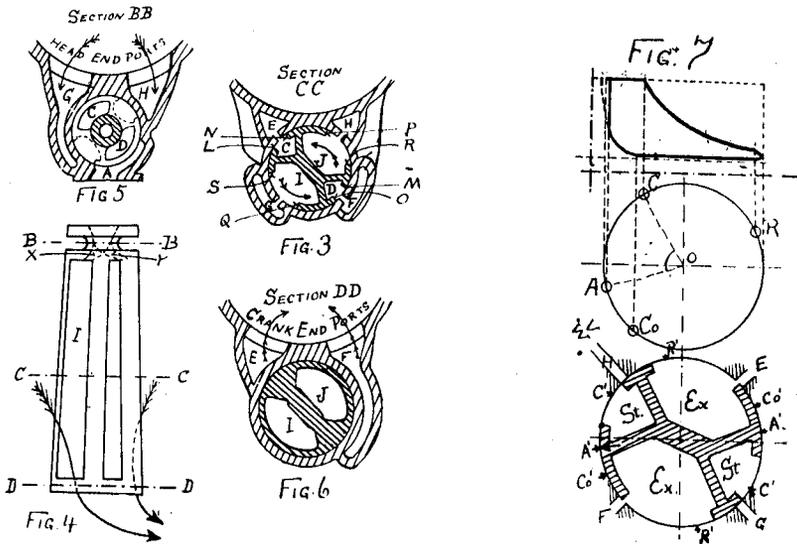
The valve consists of a slightly tapered cone rotating in a conical seat (see Fig. 2) and contains two steam chambers C and D, Fig. 3, and two exhaust

chambers I and J, Fig. 3. The steam chambers are fed through annular opening at BB, Fig. 4, from steam pipe A, as shown in Figs. 2 and 5.

The valve seat carries four parts: G and H, in Fig. 3, communicating as shown in Fig. 5, to head end of cylinder, and EF, Fig. 3, communicating as shown in Fig. 6 to crank end of cylinder. The exhaust chambers I and J, Fig. 3, communicate through openings in the bottom of the valve to the exhaust chamber U, Fig. 2, as indicated by arrows in Fig. 4.

The perfect counterbalance of the valve depends on the fact that both the valve and seat are symmetrical about the axis of rotation.

The exhaust pressure acts on both ends of the valve as the space above the valve is connected to the exhaust chambers I and J, Fig. 3, by the vents X and Y, Fig. 4. The taper of the valve, as shown in illustrations, is greatly exaggerated and the areas of the two ends of the valve are practically the same as



far as the slight end thrust due to exhaust is concerned. It will also be seen that there is no end thrust due to steam pressure in the annular opening at BB.

The valve, when in the position as shown in Fig. 3, allows steam chambers C and D to communicate with crank end of cylinder through the valve seat ports E and F, as shown in Fig. 6. The head end of cylinder is exhausting through valve seat ports G and H, Figs. 5 and 3, into exhaust chambers I and J and thence through bottom of valve as indicated by arrows in Fig. 4.

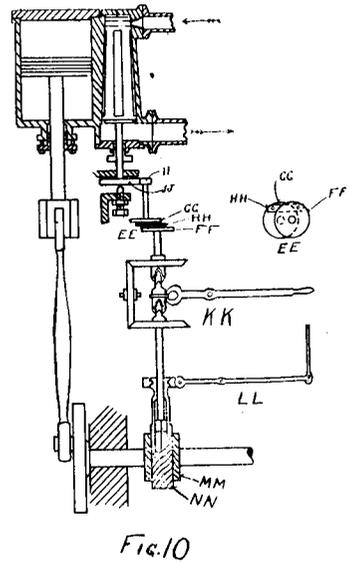
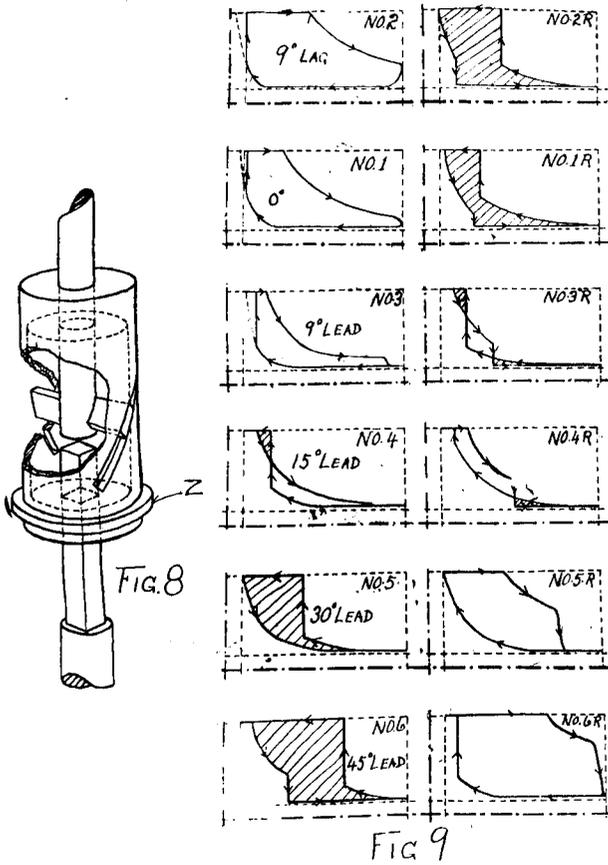
The valve as shown is designed to rotate once for every two revolutions of the crank shaft. The steam port edges L and M determine the point of admission. The steam port edges N and O determine the point of cut-off. The exhaust port edges P and Q determine the point of release, and the exhaust port edges R and S determine the point of compression. It will be seen that the location of these port edges are independent of each other, hence it is apparent that the points admission cut-off release and compression are independently de-

signed, while in a slide valve one edge determines admission and cut-off and another release and compression.

For purposes of illustration the outline of a design of a specific case will be given.

Consider the case of a 12 in. x 14 in. single cylinder non-condensing engine. Admission at $39/40$ return stroke, cut-off $1/4$ forward stroke, release at $15/16$ forward stroke, and compression at $4/5$ return stroke.

Let us take a very liberal port opening, say, as large as 10 per cent. of piston area equals 11.3 sq. in. As there are two ports to each end of the cyl-



inder and each of these can conveniently be 14 in. long, we will have a total length of port of 28 in. This will give us a breadth of port of four-tenths of an inch. Let us make the diameter of the valve one-half the diameter of the cylinder. This gives us abundance of room for exhaust chambers in valve and an exceedingly rapid cut-off. The clearance volume of this particular engine, figures to 8.5 per cent. of piston displacement.

Fig. 7 shows an indicator card with specified positions of admission, cut-off etc. In the same figure the upper circle represents the crank circle and

shows positions of the crank pin at times of admission, cut-off, release, and compression, indicated by letters A, C, R, and Co.

As a first step, let us locate positions of valve at times of admission, cut-off, release, and compression. The lower circle represents the section of the valve, and as the valve rotates only one-half as fast as the crank pin, then must the valve rotate through only one-half the angle AOC between the times of admission and cut-off. Hence $A'C'$ plotted equal to one-half AC , and $C'R'$ equal to one-half CR , and so forth. Now G and H represent the ports connected with one end of the cylinder, and E and F the ports connected with the other end, and as calculated above they are only four-tenths of an inch broad.

Rotate a circular piece of paper upon the valve circle with an index upon its circumference. First place index upon A' and mark upon the circular piece of paper the position of edge W of port H . This is the admission edge of steam port in valve. Turn paper disc till index is upon C' and mark position of edge V . This is cut-off edge of steam port in valve. Similarly for R' and Co' the release and compression edges of exhaust port in valve are determined. The valve thus designed will be seen to take care of the events for both ends of the cylinder.

Fig. 2 shows the valve as designed for the above engine and its method of control. The device K is for the purpose of hastening or retarding all events by giving the valve an angular lead, ahead of, or lag behind, its normal position. Device K is shown in detail in Fig. 8 and consists of a helical sleeve coupling, raised or lowered by means of the flange Z and a thrust block.

In Fig. 2, when lever is in the position No. 1, the engine is giving card No. 1 (see Fig. 9). Throwing the lever up to position 2 gives the valve an angular lag of 9° and the card is changed to card No. 2. Throwing the lever to position 3 gives card No. 3 corresponding to a lead of 9° . Similarly, cards 4, 5 and 6 correspond to leads of 15° , 30° and 45° ; the hatched areas representing negative work or steam pumped back into boiler and tend to stop the engine.

If the lever be left on a position giving a negative card, say, No. 5, then will the engine reverse its direction of rotation and produce card No. 5 R. The engine is now running backwards, and various positions of the lever produce the backwards cards No. 1 R to No. 6 R. If, however, the lever be now left in position No. 2, the engine will again reverse and run forwards, producing card No. 2 as before. With this arrangement the engine is controlled both in rotation and area of card by the simple movement of a single lever.

Special steam operated devices are often used in marine work to control link motions on account of heavy moving parts and uncounterbalanced slide valves.

The ease with which this lever can be thrown will be appreciated from the fact that the moving parts are light and the valve is perfectly counterbalanced. This is an important consideration in connection with the manoeuvring of tug boats.

Where a still sharper cut-off is used, a device as shown at EE , Fig. 10, is used. This consists of a drag link coupling in which FF and GG and two

discs rotating about parallel axes and connected by drag link H H as shown. Now, for a uniform rotation of disc F F we have an ununiform rotation of disc G G with one maximum and one minimum speed per revolution of disc. Pinion I I is one-quarter diameter of spur wheel J J. Therefore we get four points in one revolution of the valve where it has an exceedingly high angular velocity and these points are made to correspond to the points of cut-off. In this way almost any degree of rapidity of cut-off can easily be obtained.

K K is a device by which the valve is driven in the direction in which it is designed to run while the engine is on reverse.

When governing is desired the governor may be attached either to lever L L, Fig. 10, or control lever Fig. 2. In Fig. 10 the helical gear M M is twice the diameter of helical gear N N and the lead or lag of the valve is produced by raising or lowering helical gear N N.

An enumeration of a few advantages of this valve over other types might be of interest to the readers.

1. Perfect counterbalance, and hence requires very little power to run or manipulate it, and there is very little wear on either valve or seat.
2. On account of valve being slightly tapered no great accuracy of machinery is required as in piston valves, but can be ground in place to a steam fit. Should any wear occur it can be easily taken up.
3. The cheapness of casting and machining is apparent from the simplicity of the design.
4. There are no stuffing boxes required to withstand boiler pressure.
5. It is obvious that this valve can be run at any speed desired.
6. The rotary motion does away with eccentrics and oscillating elements which are liable to pounding due to slack motion.
7. The valve renders early cut-off and desirable indicator cards practical on quick revolution engines.
8. Valve is easily removed for inspection.

This article, written by Mr. F. Godfrey Baker, '08 Science, is a description of the Baker rotary engine valve, of which Mr. Baker is himself the inventor.—(Editor for Science.)

Alumni.

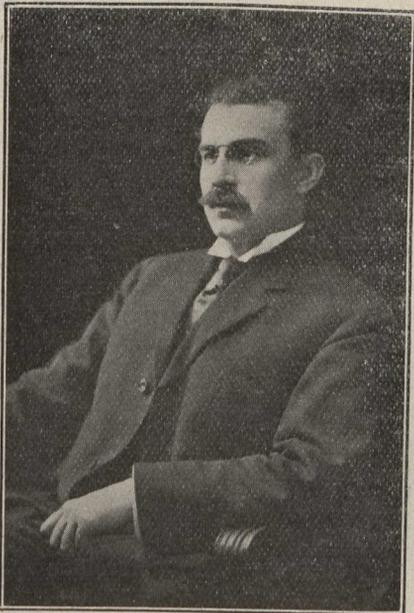
AMONG the best known and most successful graduates of Queen's in recent years is Mr. Edward R. Peacock, manager of The Dominion Securities Corporation, of Toronto.

Mr. Peacock is of Scotch descent, and like Emerson, can look back upon a number of clergymen among his ancestors. His father was the Reverend William Peacock who was educated at McGill and afterwards graduated in theology from the Congregational Theology in Montreal. Reverend Mr. Peacock became settled in a Congregational charge at Indian Lands and Van-leek Hill, and during this time the subject of this sketch was born. He after-

wards organized and became the pastor of Bethel church in Kingston, later removing to Maxwell, Glengarry, where he died in 1883.

After Mr. Peacock's death the family removing to the town of Almonte where the boy was educated, and because of his very delicate health he had never attended a public school. Nevertheless his progress was exceedingly rapid, and at an early age entered the Almonte High School whence he matriculated to Queen's College in 1890 with honours in several departments, and as a scholarship man.

His course through college was marked with the same originality, exactness and thoroughness as have marked his business course and progress since



ARTHUR R. ELLIOTT, M.D.



E. R. PEACOCK, M.A.

leaving the University. He graduated from Queen's College in 1894 as double gold medalist with first class honours in English and Political Science.

After a course in the School of Pedagogy in Toronto, Mr. Peacock became resident English Master at Upper Canada College, and with Dr. Parkin had much to do in maintaining the College as the leading boys' school in Canada.

After several years in Upper Canada College, Mr. Peacock joined the staff of the Western Canada Loan and Savings Company, and when the Dominion Securities Corporation was formed entered the service of that corporation, and has since risen to be its manager.

Mr. Peacock has become well and favorably known among all the more important investors, not only in Canada but in the larger American centres, such as New York, Boston and Chicago.

He has shown his enterprise and ability in advancing the financial interests and opportunities of Canada by opening in London, England, a branch

office of his corporation, where Canadian and other securities may be favorably offered and properly put before British and Continental investors.

He is a valued member of the University Council, and has done much to forward the interests of Queen's, and we predict for him an increasingly influential future.

Athletics.

QUEEN'S 10, 14TH REGIMENT 4.

AN hour's playing on the night of March 6th sufficed to show the difference between O.H.A. and Intercollegiate hockey. And the difference was not the one the local press had been trying to lead us to believe existed. Indeed so sure were the local papers that the 14th were the best amateur team in Canada that Queen's were almost ashamed to assert they ever played hockey at all.

Something dropped. Among other things the umpire's flag dropped ten times after having been raised ten times to record Queen's goals. 14th supporters also dropped a few too. It was a shame.

The game itself was a good one. Queen's were never in better form. Their tireless rushes and close checking were too much for their opponents. for whom it is claimed, however, that they were stale. Evidently they were counting on a sure thing. But "even a college team" may sometimes hand out surprises.

As has been said the score was ten to four with Queen's on the long end. The 14th took the first but Queen's soon evened and after that were never headed. Every man on Queen's team played the game of his life. The defence was practically unbeatable: Pennock and Macdonnell proving too much for the rushes of the soldiers, they found time too to take part in the scoring. In goal Bennett was superb, turning away shots and clearing with marvelous speed. On the forward line we were all to the good. Dobson was very effective in holding Richardson down, in centre ice Crawford and Campbell did very effective stunts, fooling the soldiers defence time and again. George at left wing played one of the cleverest games seen on local ice this season, he was always on the job and went in on the nets in fine style.

The result of this game only goes to show what Queen's team can do when in condition and when determined to win. We will have the same team in all likelihood next season and there is no reason why the cup should stay at Toronto three years in succession.

MR. MACINNES' RETIREMENT.

At Alma Mater meeting on Saturday 14th, inst., Mr. W. H. MacInnes, formally retired from the secretaryship of the Athletic Committee after seven years of faithful service. It is not to be doubted that through his relinquishment of his position on the Committee Mr. MacInnes deals a heavy blow to athletic interests at Queens.

When the former secretary-treasurer of the Athletic Committee assumed office our Hockey and Rugby teams were playing in the Ontario Union, there was little sympathy or connection between clubs representing various branches of sport, there was no Queen's Athletic Grounds, no Gymnasium, no tennis courts, no basketball team, and practically no organization of athletic interests. During the last seven years the Intercollegiate Unions in hockey, rugby, association football and basketball have come into existence. The Athletic Committee includes amongst its assets an Athletic Grounds and a gymnasium. Mr. MacInnes' tenure of office, therefore, covers a period of important changes, and development, in our system of controlling University athletics. For many of the improvements in the system Mr. MacInnes is directly responsible. He



W. H. MACINNES, B.D.

was a strong advocate of the development of inter-university relations in athletics: and played an important part in the formation of the Intercollegiate Unions that have done so much to foster clean, purposive sport. Through Mr. MacInnes' able and economic management of the finances of the Athletic Committee the purchase of the Athletic Grounds and other expenditures on permanent improvements were rendered feasible. To the retiring secretary-treasurer, moreover, is due a great deal of credit for his energetic efforts to secure a gymnasium. His management of gymnasium finances, too, is on a level with his other achievements.

The secretary-treasurership of the Athletic Committee is a position involving duties of such an important nature that they can only be discharged by a man of energy and ability. The Committee itself is responsible for general policy. The task of executing its policy falls to its secretary. Mr. MacInnes'

supervision extended even to minutest details of club expenditures. In respect of the practical side of his work he has demonstrated thorough efficiency.

An important feature of the work that falls to the secretary-treasurer is his representation of the University in its relations with other university athletic organizations. The contests of the Intercollegiate Unions have not been carried on without many negotiations and conferences. Many times Mr. MacInnes has represented Queen's in these negotiations. He taught us that our interests were safe in his hands.

Amongst the students whose affairs relating to athletics he managed for seven years there is general agreement that Mr. MacInnes deserves hearty thanks and praise for the efficient service he rendered them.

The Alma Mater Society did no more than its duty when it voted a portion of its funds to the purpose of expressing in tangible form its recognition of the importance of the work done in its behalf by the retiring secretary of its Athletic Committee.

Exchanges.

THE *Dalhousie Gazette* has begun its fortieth year. We tender congratulations and our best wishes for continued and increased success.

The *Gazette* first appeared in January, 1869, the pioneer of Canadian college journalism. Its editor-in-chief was Mr. J. J. Cameron, B.A., who, four years later, was one of the founders of our own *Journal*. The current number of the *Gazette* contains a very interesting article entitled: "Reminiscences of 1872," written by the Hon. D. C. Fraser, now Lieut.-Governor of Nova Scotia. It is an interesting sketch of the student life in a small Canadian college in the early days, and it may not be amiss for us to quote a few extracts both descriptive, and indicative of Mr. Fraser's opinions on college life. We believe the latter have a bearing upon our life at Queen's as well as upon student life at Dalhousie.

Mr. Fraser says, after decribing the students' system of housekeeping, "we were not *cursed* with 'At Homes,' dances, or the so-called claims of modern society. Church twice each Sunday, and Bible class in the afternoon were our only Sabbath outing. * * * * Y. M. C. A. lectures each month, and occasional visits to the strangers' gallery of the House of Assembly furnished food for thought and subjects for spirited political discussions."

"But our life was a pleasant one, and as we were in earnest to obtain our degree, we worked hard to overcome our previous disadvantages." (Few of the students had had any adequate school-training.)

"Football on the common and the Debating Society we considered almost as binding as class attendance. * * * * Among the students I never saw one exhibition of brutality such as is witnessed in our games to-day. The struggle was to win honorably, and the best men were never envied.

After a description of the college Debating Society "in which every student was expected to take part," and whose results were much and thorough read-

ing, and a training in presenting facts in a clear, concise manner, Mr. Fraser continues: "May I express an opinion that much too little time is given by students of the present day to such exercises of the mind. Clear thinking with exact information is an indispensable equipment for every educated man, but this alone will not prepare him for public usefulness. He must even go beyond understanding himself. What he knows and thinks, he must study to make others understand. For this purpose he must be able to recast his knowledge so that what he wishes to teach may be understandable by his audience. This he can never do unless he learns to be at ease when he speaks, so as to appreciate whether or not his views have been so expressed as to be plain to the comprehension of those who hear. A light flippancy or ability to emit words neither satisfies nor instructs, however pleasing to the speaker's vanity. Never will good, plain, sensible speaking be at a discount. All the books ever published, or that may be hereafter issued can never take its place. Human beings are so constituted that no amount of reading can take the place of the voice-manner speech of one who personally brings a message.

"We accustomed ourselves to prepare carefully what we had to say, but we did not permit ourselves to become the slaves of prepared words. * * * * Because I have seen the good effects of our old-time Debating Club in Dalhousie, I strongly recommend to the young students of my now larger Alma Mater to give one night each week to debate. It is part of a liberal education, and will repay them in after years."

Acta Victoriana in its February number has an article upon the relations between the faculties of Arts and Theology. In view of the recent motion carried in Queen's Arts Society, the following may be interesting:

"However we may try to disabuse peoples' minds of the opinion that Victoria is a purely Theological college, we should never forget that it is not purely Arts either. The one idea is an erroneous as the other. Victoria is both an Arts college and a Theological university. Whether or not this dual position is a good thing may be open to question. Personally, we think it is. But at any rate Arts students have no right to assume that they are the only true representatives of the institution, and to speak in a derogatory manner of Theology and Theological students, for such reflects upon the intelligence and good sense of the speaker."

* * * * *

"At the same time, we would offer a word of admonition to the C.T.'s" (which being interpreted—Divinities). "Some of them—we are glad to know they are in a minority—still appear to be possessed of the idea that they are superior to all such frivolities as lit., sports, etc. Such a spirit must surely antagonize the average man, who abhors, above all else, anything that savors of what he calls, "sanctimoniousness." Moreover none are more in need of the broadening influence of the general college life than those whose whole course is one of specialization along the lines of their previous work, and,

therefore lacking in those elements of general training and culture which an Arts course is designed to supply.

"The promotion of college unity and good fellowship should be the aim of every student. After all it is not as members of this or that particular class that we should wish to be honored and remembered, but as men, men who are big and tolerant, and broad-minded enough to overlook each other's idiosyncrasies, to honor true worth wherever found, and to endeavor to foster the spirit of mutual forbearance and loyalty which every one owes to his fellows and to his Alma Mater."

READABLE EXCHANGE ARTICLES.

The Trinity University Review, Dec. '07. College Spirit, Editorial; Albrecht Durer, by A. Jukes-Johnston.

The Niagara Index, January. American Progress—I. F. G.

The Concordiensis, Feb. 18. The Call to the College Man, by Charles Sprague Smith.

The Alfred University Monthly, February. Are College Students Irreligious?

The whole of the *Canadian Forestry Journal*, December.

The Presbyterian College Journal, February. The Preacher's Use of the Old Testament Stories, by Rev. Ernest Thomas. My Own Religion, by Rev. J. A. Morrison, D.D.

Book Reviews, *The Manitoba College Journal*. College or Class?—"Tober First."

Gymnasium Subscriptions.

Subscriptions to Gymnasium Fund received since Journal No. 9.

On \$100 subscription:—\$25 from Prof. Cappon, Prof. Morison. On \$50 subscription: \$30 from J. A. Richardson, \$25 from G. T. Richardson, R. Uglow, \$10 from Prof. McClement. On \$25 subscription: \$5 from A. W. Baird, W. G. Wallace, G. L. MacInnes, Miss A. F. Chown, H. W. Walker, W. F. Lockett, A. F. Mavety, \$10 from J. S. Huff, \$25 from J. R. McCrimmon. On \$15 subscription: \$5 from G. A. Simmons, W. R. Hambly, T. R. Ross, \$3 from M. C. McKinnon. On \$10 subscription: \$5 from J. W. Gardiner. On \$4 subscription: \$2 from Miss Mae Hiscock, \$5 from Miss L. Reid, \$3 from Miss E. Goodwin, \$1 from Misses E. Compton, A. F. Moffatt, E. Graham, Doyle, E. Hunter.