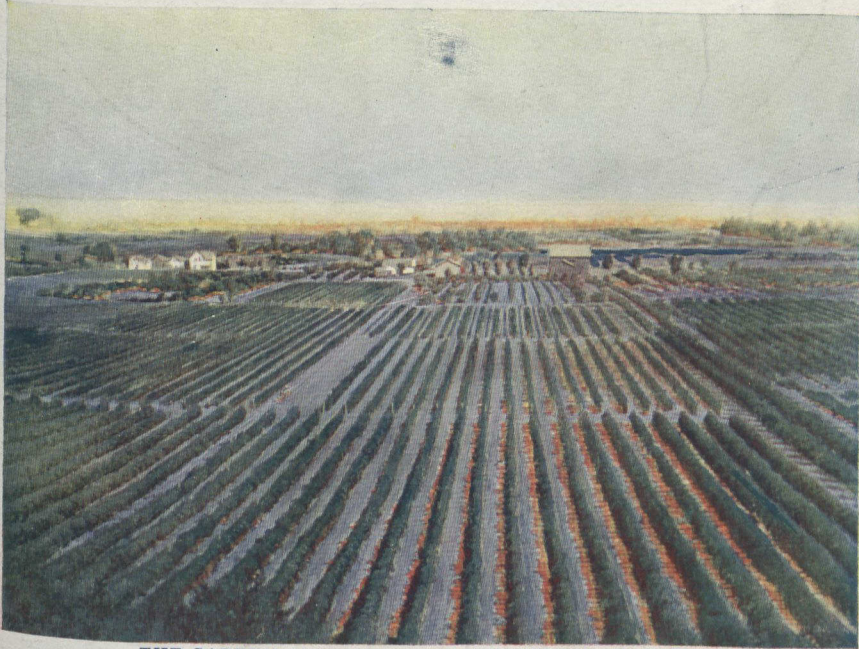


THE CANADIAN MAGAZINE

FEBRUARY 1919

PRICE 25 CENTS



THE GARDEN OF CANADA—NEAR HAMILTON, ONTARIO

EDUCATIONAL PREPAREDNESS

BY PROF. IRA A. MacKAY

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BY W. S. PLASKETT

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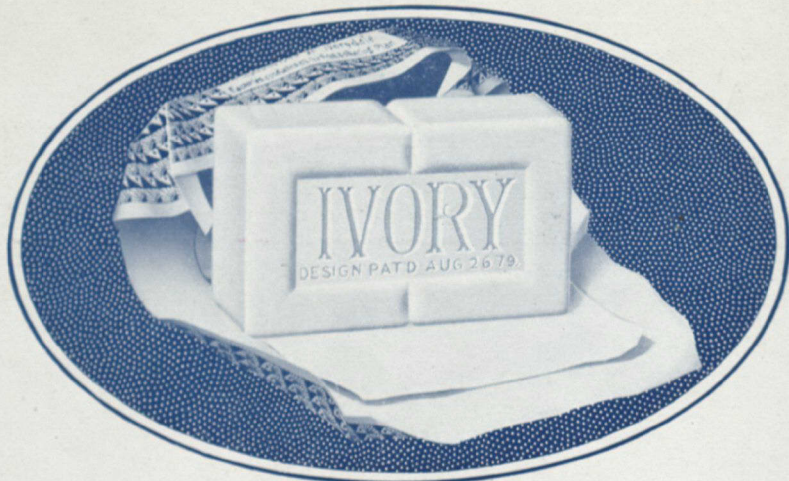
BY NEWTON MacTAVISH

SIR JOHN WILLISON'S REMINISCENCES

CANADA'S NATURAL RESOURCES

BY HON. ARTHUR MEIGHEN

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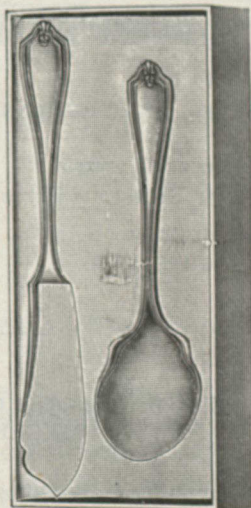
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The Canadian Magazine

Vol. LII

Contents, February, 1919

No. 4

VENICE (<i>A Painting</i>),	Clarence A. Gagnon	Frontispiece
EDUCATIONAL PREPAREDNESS - - -	Prof. Ira A. Mackay - - -	807
AN ANSWER (<i>Verse</i>) - - - - -	J. E. Hogg - - - - -	818
CANADA'S NATURAL RESOURCES - -	Hon. Arthur Meighen - - -	819
MENDING THE NET (<i>A Painting</i>) - -	F. McGillivray Knowles - - -	823
E. W. BEATTY - - - - -	James Grant - - - - -	823
WITH PORTRAIT		
SIR EDMUND WALKER'S COLLECTION OF		
ART - - - - -	Newton MacTavish - - - - -	833
ILLUSTRATED		
A CHURCH INTERIOR (<i>A Painting</i>) -	Bosboom - - - - -	841
HELIOTROPE (<i>Fiction</i>) - - - - -	Isabel Ecclestone Mackay - -	843
LIFE (<i>Fiction</i>) - - - - -	Albert Kinross - - - - -	852
A STUDY OF HORSES (<i>A Painting</i>) -	Fred Haines - - - - -	859
THE GREAT CANADIAN TELESCOPE -	W. S. Plaskett - - - - -	861
ILLUSTRATED		
FULFILMENT (<i>Verse</i>) - - - - -	Phyllis Flowers Atkey - - -	872
REMINISCENCES, POLITICAL AND PER-		
SONAL - - - - -	Sir John Willison - - - - -	873
X. A LETTER AND A MYSTERY		
ON A BALKAN SUNSET (<i>Verse</i>) - -	O. D. A. Stevenson - - - - -	882
BOLSHEVISM - - - - -	W. A. Willison - - - - -	883
NORTHERN LIGHTS - - - - -	- - - - -	890

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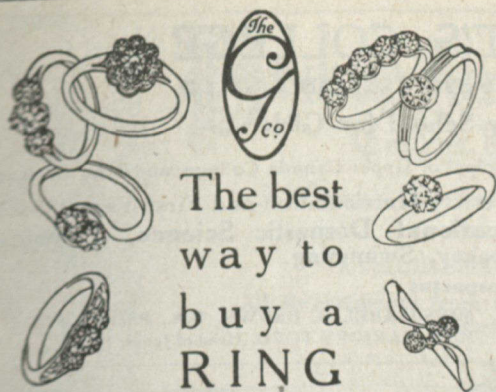
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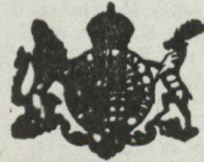
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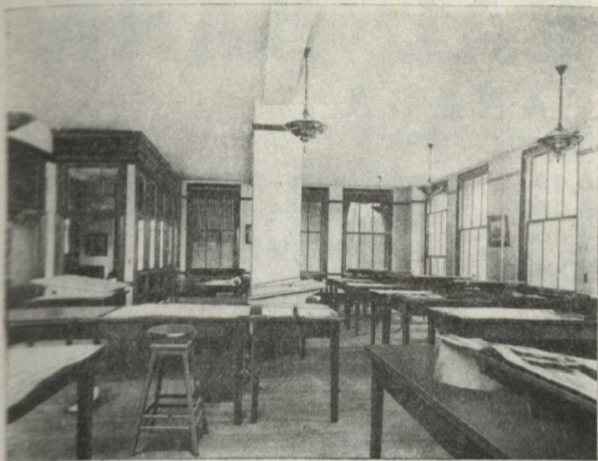
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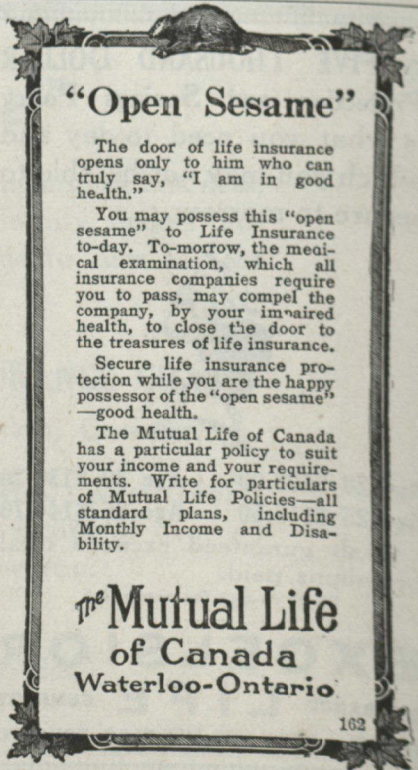
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How I Improved My Memory In One Evening

The Amazing Experience of Victor Jones

"Of course I place you! Mr. Addison Sims of Seattle.

"If I remember correctly—and I do remember correctly—Mr. Burroughs, the lumberman, introduced me to you at the luncheon of the Seattle Rotary Club three years ago in May. This is a pleasure indeed! I haven't laid eyes on you since that day. How is the grain business? And how did that amalgamation work out?"

The assurance of the speaker—in the crowded corridor of the Hotel McAlpin—compelled me to turn and look at him, though I must say it is not my usual habit to "listen in" even in an hotel lobby.

"He is David M. Roth, the most famous memory expert in the United States," said my friend Kennedy, answering my question before I could get it out. "He will show you a lot more wonderful things than that, before the evening is over. And he did.

As we went into the banquet room the toastmaster was introducing a long line of the guests to Mr. Roth. I got in line and when it came my turn, Mr. Roth asked, "What are your initials, Mr. Jones, and your business connection and telephone number?" Why he asked this I learned later, when he picked out from the crowd the 60 men he had met two hours before and called each by name without mistake. What is more, he named each man's business and telephone number, for good measure.

I won't tell you all the other amazing things this man did except to tell how he called back, without a minute's hesitation, long lists of numbers, bank clearings, prices, lot numbers, parcel post rates and anything else the guests gave him in rapid order.

When I met Mr. Roth again—which you may be sure I did the first chance I got—he rather bowled me over by saying, in his quiet, modest way:

"There is nothing miraculous about my remembering anything I want to remember, whether it be names, faces, figures, facts or something I have read in a magazine.

"You can do this just as easily as I do. Anyone with an average mind can learn quickly to do exactly the same things which seem so miraculous when I do them."

"My own memory," continued Mr. Roth, "was originally very faulty. Yes it was—a really poor memory. On meeting a man I would lose his name in thirty seconds, while now there are probably 10,000 men and women in the United States, many of whom I have met but once, whose names I can tell instantly on meeting them."

"That is all right for you, Mr.

Roth," I interrupted, "you have given years to it. But how about me?"

"Mr. Jones," he replied, "I can teach you the secret of a good memory in one evening. This is not a guess, because I have done it with thousands of pupils. In the first of seven simple lessons which I have prepared for home study, I show you the basic principle of my whole system and you will find it—not hard work as you might fear—but just like playing a fascinating game. I will prove it to you."

He didn't have to prove it. His Course did; I got it the very next day from his publishers, the Independent Corporation.

When I tackled the first lesson, I suppose I was the most surprised man in forty-eight states to find that I had learned—in about one hour—how to remember a list of one hundred words so that I could call them off forward and back without a single mistake.

That first lesson stuck. And so did the other six.

Read this letter from Terence J. McManus, of the firm of Olcott, Bonyne, McManus & Ernst, Attorneys and Counsellors at Law, 170 Broadway, and one of the most famous trial lawyers in New York:

"May I take occasion to state that I regard your service in giving this system to the world as a public benefaction. The wonderful simplicity of the method, and the ease with which its principles may be acquired, especially appeal to me. I may add that I already had occasion to test the effectiveness of the first two lessons in the preparation for trial of an important action in which I am about to engage."

Mr. McManus didn't put it a bit too strong. The Roth Course is priceless! I can absolutely count on my memory now. I can call the name of most any man I have met before—and I am getting better all the time. I can remember any figures I wish to remember. Telephone numbers come to mind instantly, once I have filed them by Mr. Roth's easy method. Street addresses are just as easy.

The old fear of forgetting (you know what that is) has vanished. I used to be "scared stiff" on my feet—because I wasn't sure. I couldn't remember what I wanted to say.

Now I am sure of myself, and confident and "easy as an old shoe" when I get on my feet at the club, or at a banquet, or in a business meeting, or in any social gathering.

Perhaps the most enjoyable part of it all is that I have become a good conversationalist—and I used to be as silent as a sphinx when I got into a crowd of people who knew things.

Now I can call up like a flash of lightning most any fact I want right at the instant I need it most. I used to think a "hair trigger" memory belonged only to the prodigy and genius. Now I see that every man of us has that kind of a memory if

he only knows how to make it work right.

I tell you it is a wonderful thing, after groping around in the dark for so many years to be able to switch the big search-light on your mind and see instantly everything you want to remember.

This Roth Course will do wonders in your office.

Since we took it up you never hear anyone in our office say "I guess" or "I think it was about so much" or "I forgot that right now" or "I can't remember" or "I must look up his name." Now they are right there with the answer—like a shot.

Have you ever heard of "Multi-graph" Smith? Real name H. Q. Smith, Division Manager of the Multi-graph Sales Company, Ltd., in Montreal. Here is just a bit from a letter of his that I saw last week:

"Here is the whole thing in a nutshell: Mr. Roth has a most remarkable Memory Course. It is simple, and easy as falling off a log. Yet with one hour a day of practice, anyone—I don't care who he is—can improve his Memory 100% in a week and 1,000% in six months."

My advice to you is don't wait another minute. Send to Independent Corporation for Mr. Roth's amazing course and see what a wonderful memory you have got. Your dividends in increased earning power will be enormous.

VICTOR JONES

Send No Money

So confident is the Independent Corporation, the publishers of the Roth Memory Course, that once you have an opportunity to see in your own home how easy it is to double, yes, triple your memory power in a few short hours, that they are willing to send the course on free examination.

Don't send any money. Merely mail the coupon or write a letter and the complete course will be sent, all charges prepaid, at once. If you are not entirely satisfied send it back any time within five days after you receive it and you will owe nothing.

On the other hand, if you are as pleased as are the thousands of other men and women who have used the course send only \$5 in full payment. You take no risk and you have everything to gain, so mail the coupon now before this remarkable offer is withdrawn.

FREE EXAMINATION COUPON

Independent Corporation

Publishers of the Independent Weekly
Dept. R972, 119 West 40th St., New York

Please send me the Roth Memory Course of seven lessons. I will either remail the course to you within five days after its receipt or send you \$5.

Name.....

Address.....

BUILDING A HOME WITH WAR-SAVINGS STAMPS

To make the plan simpler, take a concrete case.

A man had \$500 saved towards building a home when War broke out. Uncertain as to the effects of the War he waited some months, still steadily saving. Later he found that building costs had advanced greatly.

To-day, he has \$800, but with present prices this sum can accomplish no more than \$500 in 1914. So he invests it in War-Savings Stamps.

\$800 invested in Dominion of Canada War Savings Stamps this month becomes on the first day of 1924, the sum of One Thousand Dollars.

Prices will probably have adjusted themselves in great measure by then, and the man with \$1,000 will be in a decidedly better position to build according to his own requirements.

There is a suggestion conveyed in this example that all who propose to build, should consider—

FIRST, the increase in capital through investment in Government security.

SECOND, the increased purchasing power of the dollar, which at present is very low.

Those who have lesser amounts to invest will find these considerations apply similarly.

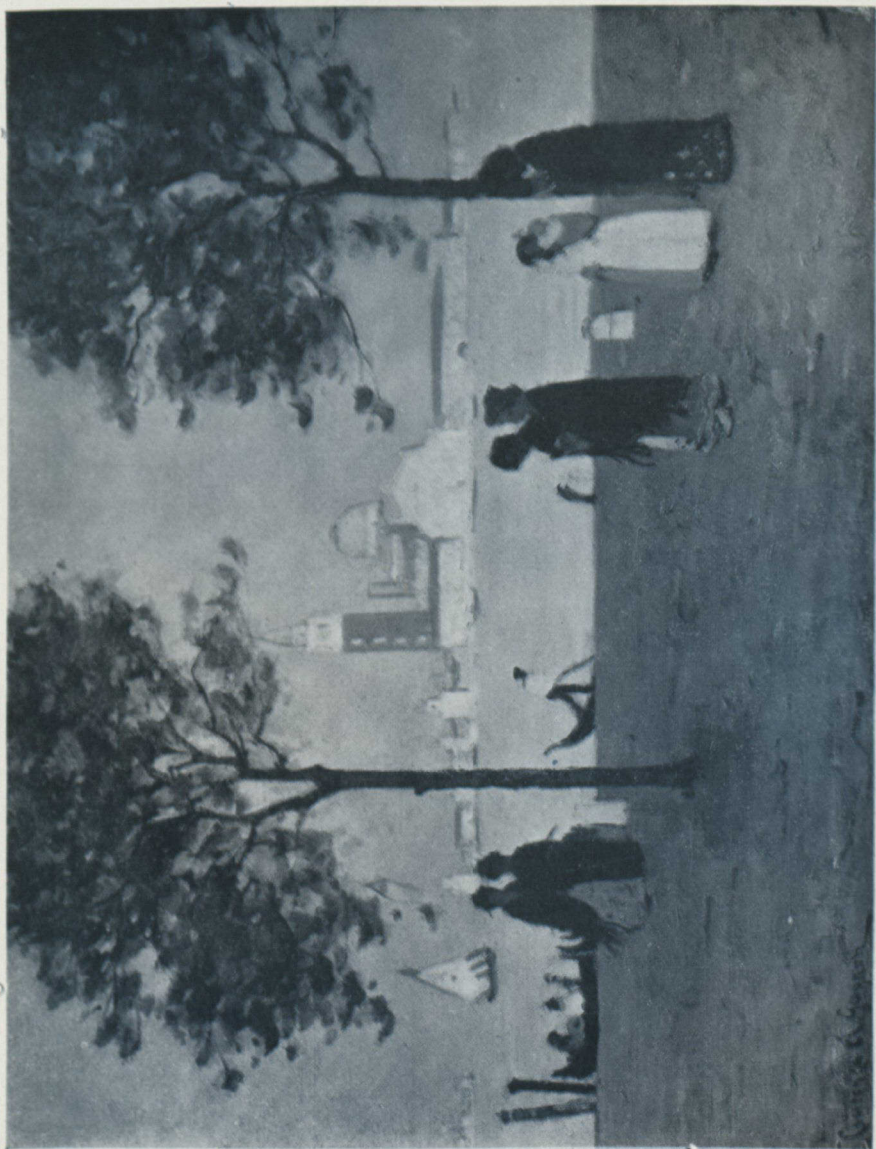
War-Savings Stamps are sold for \$4.00 each in January, advancing one cent each month thereafter, and are redeemable by the Dominion of Canada at \$5.00 each on the first day of 1924.

As an aid to the purchase of War-Savings Stamps on the instalment plan, you may buy Thrift Stamps for 25 cents each. Sixteen of these on a Thrift Card represents \$4.00 in the purchase of W-S.S.



W-S.S. and Thrift Stamps are sold wherever you see the sign.
Many patriotic storekeepers will sell you

THRIFT STAMPS



VENICE

From the Painting by

Clarence A. Gagnon,

Exhibited by

the Royal Canadian Academy



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EDUCATIONAL PREPAREDNESS

BY IRA A. MacKAY, M.A., Ph.D., LL.B.

PROFESSOR OF LAW, UNIVERSITY OF SASKATCHEWAN



THINKING over this subject of Educational Preparedness or, more specifically, Imperial and National Educational Preparedness, one usually begins with the law of the conservation of energy. There can be little doubt, indeed it seems quite self-evident, that that universal law is just as true of the mechanics of organized human conduct as it is of the mechanics of material bodies or particles moving by universal law in space. Is it not John Stuart Mill who points out in his master classic on political economy that all that men really do in the world of economics is to move material bodies or particles from one point of space to another? All that the most skilled accountant does, for example, is to move material particles of ink from an ink-well to certain pre-arranged points of space on the surface of a sheet of white paper. The reason why these otherwise trifling activities

have the far-reaching significance that they have is due altogether to the fact that they are always preceded by a long history of careful study and teaching, that is of educational preparedness. We often wonder how many martyrs were left to starve, beaten with stripes, hanged on a gibbet, or burned at the stake because of their supposedly maniacal and evil-minded pursuit of a practical theory of numbers.

If, then, this law be true of human conduct, as it clearly is, it follows just as clearly and just as certainly that the available amount of human effort or enterprise in any one community or country at any one time is a fixed and certain quantity. The amount of available labour of brain and body, to state the matter concretely, in, say, the city of Saskatoon, from which I am now writing, is at the present moment a fixed and measurable quantity. This quantity cannot be either increased or diminished. The

human reservoir of labour is of fixed dimensions. It is at present probably distinctly overwrought. Sooner or later it must lie down to rest. Measured in terms of human attainment, human achievement, human self-realization, the results are only a small fragment of what they might be made. By far the larger part is wholly wasted. The problem of national educational preparedness, then, is how we can reduce this waste. How can we, to use the trite illustration I have already used, employ at least some measure of this energy, otherwise wasted, for the purpose of producing results comparable with the results of the aforesaid skilled accountant. The answer is only by careful study and teaching, only, perhaps, by sacrificing and torturing more devoted human lives, in war, for example. The direction and correlation of the energies of human labour and the greater energies of the natural world, which science teaches human labour how to control, for purposes of human attainment, is always and everywhere the essential task of the trained thinking human mind and skilled acting human hand. That is my major premise.

My minor premise is, I think, quite as obvious as my major. That minor premise is that the natural mental endowment of every man is beyond his own control, whether he receive that endowment by inspiration from God, by inheritance from his ancestors or by the unsolicited play of the forces of nature upon his bodily sensorium. That is the principle of the parable of the talents, and a more practical principle never was uttered. Our natural endowments are the fixed initial capital provided for us with which we start the responsible enterprise of life itself. How, then, shall we expand and improve these endowments? The answer is again only by study and teaching. That is my minor premise.

If, then, my premises be true, my conclusion ought to be true. True or false, then, the conclusion I draw is that education is the only means of

attainment, of achievement, of realization, available in the ultimate nature of things for either the individual or the State. Education is the supreme power behind all human creative evolution. Education is the urge of all human uplift. Uncivilized man, for example, only differs from civilized man in degree of education. Let a single nation halt its processes of education, in the widest sense of that term, for a single generation, and it will automatically lapse back into savagery. Educate a nation in industry and commerce, and it will become an industrial and commercial nation. Educate it in science and it will become a scientific nation. Educate it in art, and it will become an aesthetic nation. Educate it in the principles of peace, freedom and justice, and it will become a peaceful nation of just and free people. Educate it in the art of war, and it will become a military nation, a misinstructed, miserable, wretched, seduced nation of cannon fodder. Or quite generally a true State will be built up upon a true scale of ultimate human values. The State is the individual human unit "writ large". Open your Plato.

Just what this scale or hierarchy of values, upon which the true State must be constituted, really is, has been, no doubt, a matter of long and bitter controversy. It is with much trepidation and searching of heart that I venture to construct my own scale. I am encouraged, however, to do so by the fact that I cannot very well be moved by any sense of prejudice or self-interest since, unfortunately for me, I happen personally to rank very low indeed in the order of merit. The scale, in descending order, is as follows: Religion, morals, literature, fine art, science, industry, commerce, finance, idleness, evil. In this article, in order to avoid all occasion for controversy, I shall omit all reference to the first two, and in order to avoid a really appalling amount of personal confession, I shall strive to omit all reference to the last two

of these values. I shall confine myself, in other words, to the problem of purely secular educational preparedness.

Secular education, I may, perhaps, define in a preliminary way, as the link, or chain of links, or quite literally, the system of artificial methods or devices by which the available sources of all the energies of human labour of mind and body are bound, directed, conveyed and made to converge upon the realization of all worthy human plans, purposes, ends, aims and ideals. Or in other and fewer words, education is the method by which culture is accomplished, and I use the word culture in the sense, for example, in which Matthew Arnold used it, and not in the sense in which Nietzsche is supposed to have used it. I should not mention Nietzsche, however, in contrast to Matthew Arnold for, as a matter of fact, for those who really know Nietzsche, he used this term in the same, although in a more serious, intense and forceful—and therefore less dilettante sense than Arnold. Nietzsche's idealism of the will to power was a real idealism; his will to power a will to power to do right and not to do wrong, a will to power to create and not to destroy, a will to power to produce the good and the beautiful, not the ugly and the evil. Nietzsche was perhaps the most intensely æsthetic mind in modern literature. He was not a Prussian. He hated Prussia. He was not a militarist. He was a most pronounced anti-militarist. The only reason—and that is no true reason—for calling Nietzsche a militarist is to be found in two or three lines in one of his psalms in his book of psalms, *Also Spak Zarathustra*, in which he apostrophizes the virtues of patience, courage, discipline and obedience in the person of the soldier. Of Nietzsche it may be truly said, as of Arnold, that he held that education was essentially a study in perfection, or a study in the methods by which human power may be employed most effectively for purposes of attaining

human perfection, or coming as near attaining it as we can. But I did not start to write an apology for Nietzsche. Let us return, then, to our main theme.

We have too long forgotten that all progress in national power and greatness is the result of national education. We have too long appealed to the principle of "muddling along"—a principle which needs only to be mentioned to be condemned by all serious, responsible, thinking men. Our enemies were not muddling along. They may have been madmen, but they were certainly not muddlers. Someone during the war described Germany aptly as an organized technical base. Mr. H. G. Wells, in a remarkably prophetic passage in "The New Machiavelli" more vividly describes the German organization as "a monster, all brains and teeth". But it is time, now that the war is over, to look at the matter dispassionately. The fact is that where we were strong our enemies were weak, and that where they were strong we were weak. We were strong in natural resources, and in the rectitude of our ideals, but they were strong in devices and methods of secular education. Our clear duty, therefore, now as always, is to strengthen our point of weakness. If we do that, ultimate success is assured; if we fail to do it, ultimate defeat, military victory to the contrary notwithstanding, is equally certain. The greatest mistake which the British Empire has ever made was the mistake of having allowed Germany to become the university schoolmaster of the world. And if we continue from now on to make the drivelling mistake, which we frequently made during the war, of tabooing education for national and imperial ends, aims and ideals, because we stupidly suppose it to be of German origin and invention, then victory has been won in vain. It is not of German origin and invention. It belonged to every nation which has ever made any contribution, however small, to the history of human civilization and cul-

ture. It belonged most of all to the little nation of ancient Greece.

The educational policy of this continent is a hybrid. Its aims and ideals are British, its methods and mechanisms are Prussian. The prevailing, indeed almost universal type is a free compulsory state-controlled system of public instruction. This system is thoroughly paternal in principle and militarist in formation. We teach our children in squads and companies, as if their minds could be made to move like their arms and legs. The reason why we adopt this plan is purely because the military formation is the simplest, cheapest and most primitive type of formation in which large numbers of minds may be easily handled and made to present a superficial appearance of efficiency and thoroughness. The system is supposed to be democratic in character, but a system which aims at moulding and making the lives of human units of uniform size, shape and colour, like so many bricks or stones to be fitted into a building, can scarcely truthfully call itself democratic. It is supposed, too, to be designed to meet the claims of the individual, but a system which refuses to recognize individual differences in endowment, effort and actual attainment can scarcely claim to be designed in the interest of the individual. At the present time we make almost no provision, indeed we stubbornly refuse to make any provision, for the exceptional boy or girl. How often have we been pained to see how our best boys and girls are reined and hobbled back to meet the arbitrary requirements of a grading system which is forced to attempt more than it can effectively accomplish! The result is, that all too many of our brightest and most promising scholars soon grow tired of the monotonous routine of the public school, and so leave the school as soon as they can, or are permitted by law to do so. In this way we are clearly depriving ourselves of our providential supply of human leadership in the community and nation, and

then we stop and wonder why it is that Canada produces so few scholars and statesmen of outstanding rank. And yet we maintain that our educational ideals are essentially British. The real truth, however, is that by adapting a German system to a British ideal we are clearly losing the results of both. We neither achieve the German results in terms of co-operative public service nor the British results in terms of individual equipment, adornment and attainment. And in the meantime our curricula tend to become ever more and more crowded by these two rival claims, and the school, divorced from the interests of the home on the one hand, and from the interests of the community on the other, inevitably loses much of that larger and more sympathetic perspective and outlook upon life itself essential to every soundly and humanely conceived system of education. Clearly a dynastic and military system is ill adapted to the needs of a community claiming the right to call itself democratic. As we have said, the military system is the simplest and most primitive of all forms of social formation. The organization of a modern industrial and commercial community is many times more complex and difficult than the organization of an army, and the organization of a free and cultured nation, in which each and every legitimate individual human interest shall enjoy the fullest right to live and grow, is infinitely more complex and difficult than either. In every nation and empire which can possibly hope or expect to rise to the highest levels of civilization and culture, some system must be found by which the claims of variety may be made compatible with the claims of uniformity, the claims of the few with the claims of the many, some plan must be devised which will recognize the claims of marked leadership, special services and exceptional attainment. What this plan or system should be, is, I admit, very difficult to determine at present. That is just the problem we have to meet in the future.

A few minor suggestions, however, looking towards a solution of the problem, may not be out of place.

I have not yet lost faith in the private school, or, as it is known in England, the public school, or in New England, the Grammar school. A number of first-class grammar schools, specially devoted to the study of classics and literature, and of preparatory science schools devoted to the intensive study of science, would clearly add much to the excellence of the system. Unless, indeed, we have some such institution, the claims of university scholarship are, at least in some parts of the country, in great danger of becoming entirely swamped in the claims of the miscellaneous general-purpose public school system. When such subjects as farming, gardening, manual training, domestic science, nature study, civics and others are being constantly and insistently crowded into the course of compulsory studies, it is surely high time to begin to return again to the essentials of a really sound and thorough fundamental education. The idea of municipal schools, now being worked out in a preliminary and experimental way in some parts of the United States, is also clearly worthy of the most careful consideration. Would some of our cities and towns undertake to establish specially equipped and well-taught schools in classics, science, art or music, the experiment would undoubtedly result in adding much desirable variety and local colour to their educational undertakings. Much, too, may be accomplished in many ways even under the present system. Much may be done, indeed, just by getting back to fundamentals. The fundamental subjects may always be taught to large classes. A truth in mathematics, a beautiful poem or work of art, is a model for all, and need only be exhibited in the right light that all may have a free and equal opportunity to understand and appreciate its truth and beauty. Much may be done, finally, by adopting a less rigid and mechanical system of

grading, by a more careful grouping of subjects and a more careful correlation of these groups to the interests and ideals of different groups of scholars; by reducing the number of pupils in the classroom, and—most of all—by the more careful and thorough training, and consequently more adequate remuneration of the teaching profession itself. The logical, and therefore, curiously enough, logically unattainable end of the process is a thoroughly trained tutor for each individual boy or girl. How far we should go in this direction is always a question of degree; how far we shall go, a question of the effort we are prepared to make and the amount we are prepared to pay. That we should be prepared to go some distance and, perhaps, a long distance, I have long been convinced.

Why should I not be permitted to exercise at least some measure of freedom in choosing an education for my son? Why, for that matter, should he not be allowed to exercise some measure of his own freedom? Why should I be called upon to throw him out at an early age into the treacherous currents of human life, there to sink or swim as he can? Why should I be virtually compelled to hand him over to the State to be educated as the State chooses, and not as I choose? Is he not my son? Am I not his parent? Am I not, indeed, the one person in the community most likely to take an interest in his future? Freedom is a precious thing in principle. Let us not forget that it is also a precious thing in practice.

Perhaps, indeed, the root and spring of the difficulty lies in the fact that we have, alike in principle and in practice, been grossly failing to fully understand and appreciate the real nature of our free institutions. Democracy is a plan or ideal of government by which the sovereign power in the State is taken out of the hands of a prerogative, privileged, leisured class and vested in every freeman who is able and willing, either by natural endowment or education, to co-operate

with his neighbour for purposes of mutual pleasure, profit and attainment, and the pleasure, profit and attainment of the community and country at large in which they live. Sovereignty is essentially the correlate of service. But service, to be effective, must be the service of experts, not of amateurs. In a democratic community each man becomes sovereign in the thing he knows best and knows best how to do. If, living in a democratic State, I want a pair of shoes, then my shoemaker is sovereign and I am subject. If I need a suit of clothing, then my tailor is sovereign and I am subject. If I wish to consult a lawyer, then my lawyer is sovereign and I am subject even at the risk of my property. If I am ill, then my physician is sovereign and I am subject even at the risk of my life. Open your Plato! Efficiency—that modern idol of the market-place—does not depend so much upon organization—that other idol—as upon the skill and training of the human unit. It is in vain that we plan an elaborate building if the materials be unsound. In that case, the very elaborate character of the plan itself becomes the chief cause of collapse. In the efficient State, the unit is the efficient individual, and the efficient unit is one who, by natural endowment, is willing to work, who by special education knows how to do his particular work well, and who by general education knows the relation of his work to the work of the man to the right of him and of the man to the left of him and to the great co-operative work of the State in which he claims the right of free, sovereign citizenship. The problem of the individual and the State, indeed—that puzzling antinomy over which we have been fighting so fiercely—is nothing else than the problem of the relation between special and general education. The true State, therefore, must recognize the claims of both these forms of education. A general, rigid, uniform education may be enough for the soldier, but it is not enough for the civilian: it may be

enough for a militarist State, but it is not enough for a free, peaceful and progressive State. Democracy spells essentially government by experts. The day of unskilled workmen, casually employed teachers and amateur politicians is ended. Let us glance now at some of the more comprehensive applications of the problem.

The education of the workman is the foundation of the State. On Sunday, November 10th last, seven hundred thousand Canadians were intensely employed; on Monday, the 11th, they were out of employment. The corresponding number for the Empire is, say, ten millions, and for all the belligerent countries sixty millions. Meanwhile, one hundred million people are at the point of starvation in Europe, and cold and bitter winter is at their doors. The prospect should give us pause.

We have heard, too, and read a great deal recently about the strike, but the principle of the strike can scarcely be successfully challenged. If the trader has the right to refuse to sell his commodities until the purchaser promise to pay the price the trader demands, the labourer has clearly the right to refuse to sell his labour until his employer promise to pay the wages the labourer demands. If the trader has the right to organize, so also the labourer. If the majority have the right to rule in the Bankers' Association, so also in the labour union. The real trouble seems to be that most, if not, indeed, all strikes appear at present to be directed towards a merely relative result. In other words, they are based on a merely trading principle. We hear every day of strikes for less hours of work or for increased pay, but who has ever heard of a strike for the opportunity to do better work? I have no doubt, indeed, that some, perhaps many, even among the workmen themselves, still entertain the ancient superstition that the manual workman has no real opportunity for self-betterment, self-culture and self-attainment. But this is quite a mis-

take. The man who works with his hands has really the best of all opportunities for self-improvement. No educational process is complete until it find an outlet in some form of interesting and effective motor reaction. It is by the work of men's hands that ideals are made real. It is the workman, artisan or artist who takes the fleeting fancies of philosophers, poets and musicians and makes them abide on canvas or in wood, stone, bronze and marble. In nothing that men do are the eternal values so obvious as in a fine bit of workmanship. And the opportunities in this direction are infinite. There is no logical stopping-place between the mason and Michael Angelo. There is no logical stopping-place between the man with the hammer and the saw and a Sir Christopher Wren or a Sir Charles Barry, or between Tom Sawyer and his brush of pig's bristle and his pot of lime and an Andrea, a Turner or Whistler. If our Canadian national labour organization will declare a general strike for the purpose of obtaining more and better educational opportunity for our workmen, I shall join the strike to-morrow.

Of the claims of scientific education, I need say little. The advocates of science are legion, and science has the additional advantage of being supposed to be more clearly related to industry and efficiency than either literature or art, although the next preceding paragraph may, perhaps, serve to suggest that to say the least, this is not strictly true. The blessings and benefits of science are inestimable. Why, then, someone may ask, have I placed science lower than art and literature in the scale of values I have given? Perhaps I am wrong. Perhaps I should have placed all three side by side. Perhaps science and art are complementary, science in the abstract, art in the concrete. But even if this be so, as it undoubtedly is, the concrete, nevertheless, seems to me to have a more powerful influence over life than the abstract. But that is

not my reason for the order named. If I must, then, confess it, I admit that my reason is that the war seems clearly to have disclosed the fact that science does not contain within itself any inherently sufficient principle of self-direction. I do not mean to say that science does not contain any inherently absolute and final value. I merely say that this value does not appear to be self-sufficing. Science is apt to be regarded, and even to regard itself, as largely instrumental. No doubt the pursuit of truth is a noble pursuit. But truth in itself is neither good nor bad; it just is. Science, in other words, is largely existential and not ideal, or let us say that it is apt to lend itself too easily to an idealism of wealth and power. I do not mean, again, that the scientist does not contain ideals. I only mean that science itself does not contain them. I admit, indeed I think it is clear, that the scientist, as a general rule, entertains nobler and more beneficent ideals and entertains them more consciously than the artist and the littérateur, but science itself, the labour of the mind, like industry, the labour of the body, may be either good or bad, constructive or destructive. But, as I have already admitted, perhaps I am wrong. In any case I can find no sufficient reason for putting science above art and literature in the scale of human values.

Perhaps, then, the real reason why I feel inclined to put art and literature above science is the practical reason that art and literature seem to be more in need of support at the present time than science, especially in Canada. The nation that overlooks the claims of high scholarship and pure learning cannot, human values being what they are, expect to play anything but a poor and despised rôle in the drama of nations. The pity is that we in Canada are probably farther behind in this field than in any other. Letters are the finest and fullest utterance of freedom; art, the finest and fullest utterance of perfection. Open your Browning. Canada is now

a nation of nine million people, almost twice the population of the Motherland in the days of Shakespeare, Milton, Spencer and rare Ben Johnson, and yet we have not produced any really great artists, writers or even scholars. Certainly not one in the class I have named, not even a Wordsworth, Browning or Tennyson, or even, indeed, a Hallam, a Gibbon, or a Grote.

Perhaps you think that education for high scholarship and pure learning has nothing to do with national efficiency. Have you, then, forgotten your blessed economic law of supply and demand? If that law be true, it is the purchasing mind that controls the market. The producer cannot be expected to produce a fine thing or the trader to handle it unless the purchaser shows sufficient discrimination to buy it. It is wholly in vain that we train and urge our workmen to produce works of great finish, beauty and perfection unless we first create a critical, appreciative, discriminating and discerning public to purchase them. Open your history. Read again the long story of human toil and trade and you will find, I am sure, that in all successful nations from the time the Phœnician scholars invented the alphabet down to the present time, education and culture always come distinctly earlier and not later than any form of abiding economic prosperity. Certainly no nation or empire has ever made the slightest contribution to human progress by merely producing and consuming commodities. It is ideals and ideals only that control the course of human civilization. Open your Plato. Ideals may be unattainable. Yet it is the paradox of life that we are each and all commanded to attain the unattainable. Science demands absolute and final truth. Art demands perfect beauty. Conscience demands perfect rectitude. What is it all but the promise of eternity? We shall fail, but never wholly fail.

I have all along been speaking only of the education of the individual in

industry, science and art. As yet I have said nothing of the State itself. I have been speaking only of the creation and the assembling of the materials out of which a national or imperial civilization may be built. As yet I have said nothing about the plan, the design, the architecture, the organization of industry, science and art necessary for its national framework, fitness and finish. I have, in other words, said nothing of the social arts and sciences, of economics, government, journalism and law, and yet these are the very warp of which industry, science and art are only the woof. It is only through the conduits disclosed by study and research in these subjects that the education and culture of the individual may find outlet, freedom, utterance, exercise, life and growth. It is only along the lines and pathways conceived and designed by these studies that individual efforts may be made to cooperate and converge upon truly national aims and ideals and so to reach a level of human attainment infinitely beyond the range of any assignable number of individuals working silently and alone. It is time to banish the last vestiges of mediæval monasticism and retirement from our educational system. In these social arts and sciences, fundamental as they are, we are far behind in Canada. In economics, especially in economics peculiar to natural conditions in Canada, we have only done a little, in the science of government almost nothing, in law almost nothing, in journalism nothing at all. What should we do? That is the practical question.

I should like to see a national institution of education in law, government, economics, applied science and business administration built at the capital city of Ottawa. Our political institutions, be it remembered, are the creation of our educational institutions. All our statesmen and public servants come through our public schools, colleges and universities. Education in its widest, truest sense is, as it is the sole object of this essay to

show, the very stuff, the very matter, yes, the very form also, and the fashion out of which the fabric of civilization is conceived, designed and woven together. Our institutions of government and our institutions of learning, our scholars and our statesmen, must be prepared to work more closely and carefully together in the future than they have done in the past. The day of amateur politicians and patronage appointments to the public service is ended. This patronage evil is the sin against the Holy Ghost in Canadian politics. It has infected with a deadly virus our whole political system in Parliament, on the Bench and in the civil service. It is in vain that we abolish party patronage, only to fall back on the patronage of sect, faction and personal influence. A competent, conscientious, civil service commission, if given a free hand, may do much, no doubt, to eliminate the unnecessary multiplication of appointments to office, but it can do nothing to create credentialed candidates for appointment to the remaining necessary and essential offices. A system of civil service examinations may do much to eliminate undesirable candidates. But if there is one thing of which a written or oral examination is not a test, it is not a test of actual efficiency. If we would seriously set about the task, then, of creating an efficient civil service, we must first set about the task of creating the facilities by which efficient candidates may themselves be created. Efficiency only arises in two ways, by natural endowment and by education. Natural endowment, genius, is beyond human control. Education is the only available weapon. I should like, indeed, to see this institution expand into a real national specialist and post-graduate university, teaching and engaging in research in all subjects, the finest and most efficient on the continent, and capable of thoroughly preparing men for our Parliaments, universities, civil service and all other branches of higher national thought and action.

It is to be sincerely hoped, I suggest, that our existing Canadian universities will not undertake this post-graduate work at present, and that they will not undertake it prematurely at any time. The tendency on the part of so many of our small colleges to assume the rank of universities produces results which can only be described as deplorable. The only result is a number of small, makeshift departments and professional schools, quite inadequate to do the work they profess to do. For example, there are a number of university schools of law, engineering and medicine in Canada with teaching staffs of one man, or, perhaps, one man and a corps of lecturers chosen from the active practitioners in the locality, who, while excellent men in the practice of their respective professions, know almost nothing about, and have very little available time to give to the work of teaching and research, even in their favourite branches. The result is serious overlapping, the unnecessary waste of much-needed money, and an outright fraud upon the students who are induced to attend these institutions in the hope and belief that they are getting an adequate education. All these arguments apply to post-graduate work as well as to undergraduate work. Moreover, experience, I also suggest, has shown beyond all questions that the attempt to inject post-graduate work into undergraduate systems often proves fatal to the life of the undergraduate departments themselves. All the more ambitious and progressive men on the staff naturally want to give post-graduate courses. Post-graduates are required to take undergraduate courses and undergraduates allowed to take post-graduate courses. The result is that the work of each university department is divided up into a number—sometimes as many as fifty—arbitrary courses taught by different professors, and the student is allowed or required to take a course here and there, and thus ultimately precluded from gaining a careful,

comprehensive and properly co-related course of study in any single department. In other words, the claims of special education are insidiously allowed to undermine the claims of a sound preliminary general education. What we really do need, on the other hand, is an ever more and more careful co-relation and grouping of subjects around the interests and ambitions of the individual student.

Finally, if high school and university work be properly carried on by separate institutions, why should not university undergraduate and post-graduate work be also carried on under a similar plan? The transition from undergraduate to graduate work is even more marked than the transition from the high school to the university. Undergraduate work is general, post-graduate special. Undergraduate work is adolescent, post-graduate adult. The undergraduate learns what others have learned before him, the post-graduate seeks to extend the frontiers of learning by independent research of his own. The undergraduate is being taught, the post-graduate is being taught to teach others. To the undergraduate the institution is everything, to the post-graduate the institution is of merely secondary, and the department, indeed usually a single man in a department, of prime importance. The undergraduate seeks out the institution that will give him the best general education, the post-graduate seeks out the one man in all the world with whom he wishes to work in his chosen subject. Indeed it is usually unwise for the post-graduate to carry on his work in the same institution in which he received his college training. It is much more desirable that he should go to one or more different institutions, or even to a foreign country. But I need not elaborate farther. All these arguments tend at least to show that, if we are going to attempt graduate work in Canada in a serious way, it should be undertaken in a separate institution such as I have indicated.

After all, our national political constitution is federal in form. Why not, therefore, our complementary national educational constitution? Why should Canada not have a single, national educational head and system of creative co-ordinating brain centres? I know of no finer memorial to the memory of our fallen dead than the foundation of an institution such as I have described.

Let me now attempt to tell the history of this idea in my own mind. In 1912 I attended the Congress of the Universities of the Empire in London. The first day of the Congress was set aside for the discussion of post-graduate university education. The evening before the Congress a few of us colonials met together informally and decided to present our claims. Our cause was clear enough. We wanted more and better qualified men from the Motherland for appointments in colonial universities, and we wanted more and better opportunities in the universities of the Motherland for training our own colonial scholars for Empire university service. We estimated that about five hundred new men were needed for university appointments in the Empire every year, without mentioning the very much larger number who desired special post-graduate courses for private professional reasons. We knew that Lord Rosebery would be in the chair in the morning, and what with my notorious admiration for that noble lord and his many previous warnings to the British people touching this very question of national educational efficiency, I naturally expected a field day in Imperial education. What, then, was our astonishment in the morning, when Lord Rosebery, with that marvellous sensitivity with which he is so abundantly endowed, which can sense a situation almost before it has arisen, launched forth into an impassioned address, refusing in any way to disturb the characteristic quality and culture of the British collegiate system for the purpose of co-operating in any system of spe-

cial post-graduate university teaching and research such as is known in Germany and the United States. Needless to say, our claims were not urged at that conference. Everybody felt the situation, and after the session rose I stood on the steps of the Imperial Institute and watched the representatives of the colonial universities go one way and the representatives of the home universities go another way, and a great sadness entered into my heart, for I felt that another link in the chain of Empire had that day been burned in the fire. And yet Lord Rosebery was quite correct. It would be a pity, a great pity, indeed, to disturb the characteristic excellence of the education given by the Oxford College, by attempting to inject post-graduate work into the system. If post-graduate work is to be done at Oxford it should be done in a separate institution. The facilities, however, are much greater in London.

My own idea now is that we should build from the ground up a new Imperial University in London, devoted exclusively to post-graduate research and teaching; the most efficient and finest in the world, and that funds should be forthwith raised for that purpose from all public and private sources available in the Empire. Just think of that great city of London, with its museums, its art galleries, its hospitals, its libraries, its Inns of Court, its institutions of government, at once the heart of the Empire and the centre of the world's commerce and life. No people ever had anything like such splendid facilities offered them for organized, efficient, advanced education on a large national and imperial scale.

And now, I know, you will suspect that I am quite mad. But I have already amused myself by picking out two or three alternative sites for this Imperial University. I like best the site in Kensington Gardens, between Knightsbridge and Bayswater, with Kensington Palace in the rear, the Albert Hall, the Imperial Institute, the Natural History Museum and the

Victoria and Albert Museum to the right, that wonderful place, the British Museum, five minutes distant by the tube on the left, and in front all the magnificent open space composed of Hyde Park, Green Park and St. James's Park clear to Buckingham Palace, Trafalgar Square, Whitehall and Parliament Square—the human centre of the world! Only a dream! My readers, it is a dream that will come true, or this Empire will crumble at the base and fall away.

But someone may ask, why more than one such institution? The truth is that we shall need, not two only, but a score of such institutions in the Empire. In Germany, before the war, there were about twenty universities doing the very highest grade of post-graduate work, and in the United States both before the war and now an equal number of institutions doing an equally high grade of work. Before the war, Germany was the university school-master of the world. Is the United States going to be the university school-master of the world after the war? The question for us is, is the British Empire going to do its share of this work, or is it not?

And now, finally, I must answer a criticism which is often foolishly made against this whole subject of national and imperial educational preparedness. We are sometimes accused, those of us who have been insistent upon this subject, of at least following the dangerous instincts of Prussianism, of at least trying to dragoon education into the service of the State, and ultimately into the cause of British Imperial supremacy and domination. Nothing can be farther from the truth. We are not trying to dragoon education into the service of the State, but to dragoon the State into the service of education. The motto of our imperialism is not world-supremacy but world service. It is not the might but the tremendous responsibility of the British Empire which moves us. We have undertaken to administer the greatest trust, the greatest guardianship, without doubt, that ever has been

undertaken in the history of the world. Our far-flung Empire covers one-fifth of the surface of the globe, including most of its important naval and strategic centres. Our population includes all races and nations and creeds of men. To mould these people and these vast resources into any characteristically British contribution to the history of civilization is a task which may well daunt the heart of the boldest Briton. Indeed, we are not yet an Empire at all. We are only a project, a sentiment, a hope, a vision of Empire. We have suffered and bled and died for freedom, but freedom itself is nothing except the

opportunity for the performance of duty and for the faithful discharge of all public trusts. We have pledged ourselves to the cause of peace, but peace, too, is nothing except the opportunity for service. Peace is like the April morning's Easter sun, but if the heart of man be idle, selfish, subterranean and corrupt, no life will come. Unless we are ready, indeed, to make good use of the peace which is now happily ours, our awful sacrifices will have been in vain. Our next move must clearly be made in the direction of Imperial educational reconstruction, looking towards future Imperial solidarity.

AN ANSWER

By J. E. HOGG

REST now in peace, ye Flanders dead,
 With each a cross to mark his bed
 Where poppies grow.

The boastful Hun
 Who thought by might of sword and gun
 To win the world, his quest has fled.
 Ye noble dead,
 The fight ye led is won,
 And peace is round us shed.
 We live and love because ye bled
 "In Flanders fields".

Your cause has triumphed 'gainst the foe,
 To us in vain ye did not throw
 The torch;
 With pride we hold it high,
 And freedom's light shall never die.
 Sleep then in peace,
 Where poppies blow,
 "In Flanders fields".

CANADA'S NATURAL RESOURCES

BY HONOURABLE ARTHUR MEIGHEN

MINISTER OF THE INTERIOR



CANADA'S more accessible and productive regions have offered such obvious and distinct advantages to the settler that these portions have almost wholly absorbed the attention of our population, so much so that definite information as to our great hinterland is meagre in the extreme. The unexplored area in 1916 is estimated by Mr. Camsell at 900,000 square miles, or twenty-five per cent. of our entire domain. It stretches with casual interruptions from Hudson Bay westward to the Yukon and eastward to the Labrador coast. The best I can do is to present with what clearness I may a brief topography of the Dominion and a partial sketch of her possessions. There may be much in what I say characterized by indefiniteness

and of the nature rather of indications than of positive ascertainment, but such is necessarily unavoidable in the present state of Canadian prospecting and exploration.

Canada may be likened to a monstrous torso resting on the American Continent, both arms being severed by political divisions. Alaska on the west has gone to the United States, and Newfoundland, the oldest British possession, remains aloof on the east. Nevertheless, the area remaining is somewhat larger than the United States, Alaska included.

Speaking broadly, the general slope of the country is northward, some two million square miles—or over half—draining into the Arctic Ocean and Hudson Bay. About one and a half million square miles falls towards the east, draining into the North Atlantic,

EDITOR'S NOTE.—This address was delivered recently by the Canadian Minister of the Interior to the Royal Geographical Society in London. Introducing Mr. Meighen, the President of the Society said: "We are here to-night to learn about the resources of that great and growing country Canada. The distinguished Canadian gentleman who will address us has already been introduced through the daily press to the British public, and he has been described as a bright and particular star that has lately risen on the political horizon of Canada, and as a man who may yet some day be called upon to guide her destinies. Therefore I need hardly say that you will have an account of Canada from a past-master of his subject." Mr. Walter Long, following the President, said: "Our President, when he was introducing Mr. Meighen to this distinguished audience, said it was possible that at some future time it might fall to his lot to guide the destinies of the great Dominion of which he is to-day a distinguished representative. I think the reflections to which we have listened, the description of the country which he has given us, and the declaration that he has so emphatically made as to what is to be the future of that Dominion, of her policy and of her people, must give us great confidence. But should that fate—may I so describe it?—overtake Mr. Meighen, the destinies, the future, and, above all, the honour, of that great Dominion will be in the keeping of safe and strong hands."

and about half a million square miles on the western coast beyond the Rocky Mountains range drains into the Pacific. Only a comparatively negligible basin, less than 13,000 square miles at the southwest end of the western prairies, drains into the Gulf of Mexico.

To obtain a systematized view of Canada's general physical features, and consequently of her mineral contents, it is convenient to make a few bold divisions. In geological formation the Maritime Provinces of Prince Edward Island, Nova Scotia, New Brunswick and the southeast portion of the Province of Quebec constitute the northern end of the Appalachian Mountain system. The chief basic constituent is pre-Cambrian rock (covered, of course, in the main with later and more fertile deposits), and within this geological province are found the minerals that inhabit the Appalachian system along the Atlantic States and that have added so much to their wealth. Coal, iron, and gold predominate, the first-named being up to the present of the greatest importance commercially. The significance in the national balance-sheet I will call to attention later. The next geological province is the lowlands of the St. Lawrence basin, draining from both south, north and west into this mighty river. This formation is Palæozoic. The minerals found and the nature and productiveness of the surface generally are true to the record everywhere of that formation. Over this territory is now spread the larger portion of the population of Canada.

What I might describe as the main framework geographically and geologically of the Dominion is the Laurentian Plateau. This is a tremendous V-shaped territory stretching from Newfoundland and Labrador on the Atlantic coast across the Provinces of Quebec and Ontario around the southern basin of Hudson Bay, and thence northerly, and to some extent westerly, toward the vast northland. As everyone knows, the rock formation of

this plateau is of granite character and of pre-Cambrian age. It is widely believed that at one time the great mass, if not all, of North America was constituted by this formation, the overlying strata and deposit now existing being the product of succeeding ages of erosion, volcanic action and vegetation. This pre-Cambrian granite abounds throughout Canada in the minerals characteristic of that formation everywhere, *viz.*, in copper-nickel, cobalt, silver, zinc, lead and iron. A tongue of these rocks projects southerly into the State of New York, and supports there some of the large and varied mineral industries of that State. Another tongue crosses southerly from Canada into the States of Michigan, Wisconsin and Minnesota, and contributes to these States the Michigan copper mines and the great Lake Superior iron ranges. It may be of interest to know that the products of these mines, though they are out of Canada, contribute more as yet to the traffic of the Great Lakes than even the tremendous wheatfields of the West. Within the body of this plateau in Canada are found the great nickel mines of Sudbury in Central Ontario, from which mines the British Empire and the Allies in this war have drawn almost all their nickel supply, so vital now to military and naval equipment. Close by are the great Cobalt silver deposits, and farther to the east are the corundum deposits of Ontario and the molybdenite and asbestos deposits of Quebec. The latter, and as well the nickel deposit, are the largest respectively in the world. On the extreme east, though in Newfoundland and not in Canada, are the world's greatest iron mines—mines which, in furnishing the material for our steel production, have contributed vastly to the war effort of Canada. All the great minerals known to occur in the developed southern edge of this plateau have been noted by explorers in the northern reaches of the same formation. Copper in particular seems to be abundantly prevalent in the northern and

western expanses, so much so that discoveries are heard of from almost every quarter, wherever the prospector travels. The Eskimo, who are located at various points northwesterly from Hudson Bay to the Arctic, have their spears, snow-knives, ice-chisels, fish-hooks and arrow-heads beaten out of pure native copper, and even use copper tops for their smoking-pipes. Their stories agree with the explorers' as to the vast quantities of native copper along the Arctic coast and on islands near the coast. Within the present populated area, however, there have recently been discovered deposits of this metal of present commercial importance. One mine lately opened at Seist Lake, northwest of The Pas, is so rich in copper that the ore has been shipped in very substantial quantities, forty miles drawn by wagons to the Saskatchewan River, 190 miles taken by barges down the river to The Pas, and thence 1,500 miles by rail to the smelter in British Columbia; and after carrying this burden of transportation so rich is the ore that it yields a handsome profit.

The Atikonan iron range just west of Lake Superior, and the Michipicoten mining district to the north of the same lake, are the conclusive evidence of the presence of commercial iron in the northern as well as the various minerals that will in good time be uncovered, as well as the southern reaches of this plateau. The immensity of the deposits of these various minerals that will in good time be uncovered, as well as the meagre character of our information as to the earth contents of our country, may be judged from the fact that the nickel mines just referred to were unknown until about twenty years ago, when they were accidentally discovered in the construction of a railway. The premier silver camp of Canada at Cobalt, although only a few miles from one of the earliest routes of travel and from the silver-lead deposits known for 150 years, remained undiscovered until fifteen years ago.

To the west and south of the Laurentian Plateau is the great interior plain constituting the larger portion of Manitoba, Saskatchewan and Alberta. This territory is principally agricultural and is underlain by a rock formation of later Cretaceous age. This formation contains coal in great abundance, as well as mineral clays and cement material.

On the farthest west comes the fifth and largest geological province: the Cordillera. This is the northern projection of the great Cordillera range that extends over the whole western coast of North America and covers a territory in Canada 1,300 miles north and south by about 400 miles in width. Included in it is the mountainous region of British Columbia and the Yukon. The entire range stands unparalleled in the world for the continuity and extent of its mineral resources, and in Canada as well as in Alaska are to be found within its folds the same deposits of gold, coal, copper, lead and zinc that characterize the entire system throughout its continental length. The value of the production is constantly growing, but possibly in no portion of Canada is the extent of the unprospected so vast as in this territory. This range has given to the Dominion its majestic system of mountains which constitutes one of the great tourist attractions of the world. The Rockies range in height from 10,000 to 13,700 feet, but the highest known point in Canada is Mount Logan of the St. Elias Range of the Yukon—19,539 feet.

It may interest some to recall to mind that 100 miles west of the Cordillera, and only twenty-five to thirty north of the Peace River, is a plateau 10,000 square miles in area and about 2,500 feet higher than the surrounding land. Though close to a much-navigated river, only one white man has ever crossed this plateau. There is a lake on it sixty miles long, never yet even mapped. The heights swarm with caribou, and it is called the Caribou Plateau. There is another north of Lake Athabasca. It is 47,000 square

miles in extent. One point in it at the north is a paradise for the Indian hunters, who gather there every fall. And this plateau also only one white man has ever crossed; he was Samuel Starne, who traversed it twice 145 years ago.

It is the tendency of people far removed in point of distance to form exaggerated notions of the outstanding physical features of a country, and as a consequence I find that Canada suffers somewhat in the eyes of the outside world from erroneous ideas as to its rigorous climate. The Dominion is indeed a northern land, and there are undoubtedly large portions of its Arctic and sub-Arctic territory within which the ordinary pursuits of life cannot be followed, by reason of the shortness of the seasons and the extremity of the climate; but the proportion of this territory and its effect in the estimation of the capital assets of the country are not nearly so great as is the prevailing impression. While the atmosphere as a rule grows colder as one proceeds northward, it must be remembered that the elevation of the country as well as its latitude must be taken into account in arriving at natural conditions governing climate. The elevation of the great body of our western country, for example, is thousands of feet lower than it is south of the United States boundary, and as a consequence the climate moderates as the lower levels are reached. It is stated on competent authority, after careful study, that spring in the Peace River district (a territory of vast extent and fertility), in Central and Northern British Columbia and in Alberta, begins earlier than it does farther south, and indeed advances southeast at the rate of 250 miles a day. Summers in the Northwest are warm, and, as civilization advances, are not unduly short. Not only is the elevation lower—accounting in part for this phenomenon—but the mountains on the north as a rule are also much lower, and through their passes blow the Chinook breezes from the Pacific. The presence of almost innumerable

lakes, many of them of great extent, throughout the Northwest exercises as well a moderating influence on the climate.

The value of Canadian agricultural production, as well as its promise, is too well known to justify elaboration by me in this address. It is my purpose, though, to say a word as to certain of our resources with regard to which less definite impressions exist.

The coal deposits of Canada, while very far indeed from being fully explored, may now be estimated on a reasonably safe basis. So far as discovery has yet proceeded, we do not appear to possess anthracite coal in quantities comparable with those enjoyed, for example, by the United Kingdom or by the United States of America. We have, however, even of this variety, very substantial quantities. Located in Western Alberta, in the basin of the Cascade River, are deposits of anthracite estimated at 400 million tons. The total tonnage of anthracite in Canada appears to be approximately two thousand one hundred million. This is less than twenty per cent. of the anthracite tonnage estimated to be in reserve in the British Isles.

Coming to bituminous coal, the reserves of Canada are undoubtedly immense. The Province of Alberta alone, which is indeed a territory veritably charged with this mineral, is underlain to the extent of about 30,000 square miles with bituminous and semi-bituminous coal. Nova Scotia is, of course (as yet at all events), our greatest coal-producing Province; and indeed Canada, measured by the standard of production rather than of reserve, cannot be said to stand as yet in the front rank of coal countries. War conditions, or war necessities, are proving the mother of invention, and there can be little doubt but that the not distant future will see a very marked advance in coal-mining. For the present it may be worth while, although by no means in the nature of new information to the members of this society, for me to emphasize the



MENDING THE NET

From the Painting by F. McGillivray Knowles, Exhibited by the Royal Canadian Academy

stupendous reserves that lie in the bosom of our Dominion. Including only anthracite and bituminous coals, the best estimate available places the reserves of Canada at 285,000 million tons. Including lignite also, which is already in use, and for the greater use of which the Provincial and Dominion Governments are organizing, the total deposit may be placed at 1,234,000 million tons. This constitutes about seventy per cent. of the entire coal reserves of the British Empire, and of this more than four-fifths is in the single Province of Alberta. The British Empire is said to contain one-quarter of the coal reserves of the world. Much of this great natural wealth in Canada is inland, and may not experience rapid development, but, on the other hand, there are vast supplies close to water transportation on both the east and west shores that will share more and more in the world's trade. Another feature of importance is that not a single Province is without its supply, and only a limited though thickly populated territory in Central Canada is far removed from this great source of fuel and power.

Closely allied in modern commercial calculations with the question of coal is the subject of water-power. Here the Dominion stands in a position of great natural advantage, and what is of perhaps more immediate consequence, in a position of relatively rapid present development. It is a matter of much interest as well as of stupendous importance that the great hydro-dynamic powers of Canada are located profusely throughout the very territory which does not enjoy the advantage of coal deposits. Throughout the Provinces of Southern Ontario and Quebec, and of Manitoba as well, are to be found as superbly placed and as mighty water-powers as exist in the world. It is not worth while in our time to discuss all the water-power resources of the Dominion, for many of them are situate in districts that for the present are without substantial population; but confining our-

selves to the peopled parts of Canada, a fairly thorough survey has been made by competent engineers under the Water-power Branch of the Federal Department of the Interior, and this survey places our potential commercial water-powers at a capacity of 18,805,000 horse-power. Of this total capacity there has already been developed 1,735,600 horse-power, or a little less than ten per cent. Such a development is, in my humble judgment, creditable to Canadian resource and Governmental activity, especially when regard is had to the paucity of population and to the short period over which operations have proceeded. The water-power development of the Province of Ontario and its control are achievements from which every Canadian can take confidence and hope. Of this eighteen million odd potential horse-power in the settled portions of Canada, a little less than six million is in the Province of Ontario, and six million is in the Province of Quebec. The falls are all within easy transmission distance of the great industrial centres of these Provinces, and, properly directed and coordinated with our other fuel resources, constitute the magnificent basis upon which the future industrial progress of these great Provinces rests. A single horse-power is estimated for power purposes as of the fuel value of ten tons of coal. There is being used in Canada in the form of water-power the equivalent of an annual consumption of 14,600,000 tons of coal, or not far below our present coal importation. Coal is destructible and exhaustible; water-power is indestructible. Among the exports of Canada to-day is an item of 275,000 horse-power, or the equivalent of practically three million tons of coal, which amount almost represents the total anthracite importations into the Dominion. Our exported power is being utilized by the United States industries for war purposes. Perhaps I might be permitted to place on your records a table showing the available and developed power in the settled

portions of each of our respective Provinces, *viz.*:

Province.	Power available.	Power developed.
Ontario	5,800,000	789,466
Quebec	6,000,000	520,000
Nova Scotia	100,000	21,412
New Brunswick	300,000	13,390
Prince Edward Island	3,000	500
Manitoba		76,250
Saskatchewan	3,500,000	100
Alberta		32,860
British Columbia	3,000,000	269,620
Yukon	100,000	12,000
Total	18,803,000	1,735,598

An interesting feature of this development is the fact that seventy-eight per cent. of the total water-power now in use is publicly controlled. Of the balance, fourteen per cent, is consumed by pulp and paper manufacturers situated mainly at more remote points away from industrial centres, and the remaining eight per cent. is used in electro-chemical and similar processes. The electro-chemical industry appears to be due for rapid advancement in Canada. Its products at the present time are, I believe, almost wholly used for war purposes. Indeed, through Provincial and Dominion control, priority is given to war productions in the allotment of all our developed water-power. The Dominion stands second in the world, and not far below the United States, in the wealth of its hydro-dynamic natural resources. There are no three countries in Europe whose water-power potentialities added together would equal those of Canada. When it is considered that one-fifth of the railway tonnage of the Dominion consists now of the haulage of coal, some idea may be obtained of the importance of our water resources in the commercial expansion of our country.

I would not venture to discuss before scientific men any explanation of the extraordinary abundance of our waterfalls, but, briefly put, my rough understanding is this: the phenomena of the glacial age in their retreat from the surface of the globe lingered last in its northern zones, and these waterfalls are the immediate progeny of

those phenomena—the liaison between us and those far distant times.

If there is one possession of the Dominion more than another the value of which we have failed to realize ourselves, it is our forest wealth. There are no good guesses as to the extent of this resource, for the reason that forest exploration even to this day is singularly incomplete. The best qualified experts we have, while reluctant to hazard an estimate, place the extent of tree-covered territory at between five hundred million and six hundred million acres, of which perhaps three hundred million acres are covered with merchantable timber. The ravages of fire accompanying the progress of settlement have devastated vast areas and destroyed a deplorably large proportion of this element of our national capital. It is true the burnt-over mileage is in process of reforestation, but the rate of progress is slow. However, through the activities of Provincial and Federal authorities, organization for the control, conservation and proper utilization of our forests is becoming more and more efficient. The forest area is spread over the length and breadth of the Dominion, except perhaps in the very farthest north, and is everywhere except there in quantities and locations commercially valuable. It is noteworthy that even in the older Provinces of Nova Scotia and New Brunswick the greater portion of the land is still tree-covered, the area in Nova Scotia being two-thirds of the whole, and in New Brunswick about four-fifths. The Province of Quebec is the most richly endowed; and so great is the entire supply that the utilization of our forests for lumber, fuel, pulp and paper, though substantial and great enough to constitute one of the foremost of our exports and sources of wealth, is even under present conditions of administration very substantially less than the annual increase from natural causes alone. The pulp industry of Quebec in particular is extending with great rapidity, but as yet it is estimated—though with a de-

gree of uncertainty due to the inadequacy of our investigations—that the depletion by use is not more than one-sixth of the natural growth. In the farther western Provinces the proportion will be less. The trees in that Province reach majestic proportions and attain a venerable age. Douglas fir, which is the principal variety, grows at times to a height of 300 feet and to a diameter of fifteen feet. It is true that these dimensions are exceptional, but elevations of 250 feet and diameters of from six to ten feet are common. The Sitka spruce—a variety which flourishes along the coast—has proved of superior value for aeroplane production, and is now being utilized in substantial quantities for that purpose. The large islands on the Pacific coast are especially fortunate in their forest possessions, and the annual growth in that region, due to climatic and soil conditions, is much more rapid than in the other portions of the Dominion. For the purpose of forest preservation, silviculture and reforestation, forestry branches have been established by the Dominion Government and by most of the Provincial Administrations. A total of 159,000,000 acres have been allocated to forest reserves, and over these areas the organizations of the various Governmental branches exercise supervision. Their activities are directed first to the protection of their respective reserves from forest fires, and in this respect have, particularly in recent years, achieved a considerable degree of success. The total number of fires during 1916 was 891, as compared with 1,455 in 1915, and 1,986 in 1914. The total area burnt over in the last fully recorded year was 116,310 acres, of which area only 2,000 acres could be classed as merchantable timber. The Dominion organization also oversees lumber operations and wood cutting within other areas, and in the reserves has commenced a system of reforestation, though as yet on a modest scale. Nurseries have been instituted, and last year some seven million trees were distributed for

planting free of cost to the farmers on the Western plains.

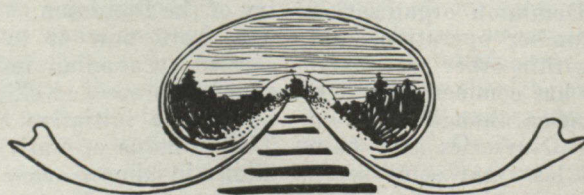
If one of my listeners takes up a railway map of Canada he is impressed with the comparative narrowness of the belt of settlement that stretches across the 3,500 miles from ocean to ocean. There appears to be an almost illimitable area of barren land—and indeed barren land it is geologically called—stretching away toward the vastness of the Arctic. There is one feature, however, of this territory to which it is fitting now to call attention. The land is by no means barren. It supports a wealth of plant and animal life, and no barren land can do that. The few explorers who have visited these regions, commencing with Stearne in the latter half of the eighteenth century, report very enthusiastically not only on the splendour of its summer climate, but on the richness in many parts of its plant and animal production. Its fur resources are enormous, and it is not improbable that the animal product of this territory will yet become commercially valuable. All explorers unite in affirming that the country is literally covered with enormous flocks of caribou. Mr. Thompson Seton declares that at a most conservative estimate there must be thirty millions of these animals inhabiting the Western northlands. They are said to be easily domesticated. They weigh from 100 to 400 pounds, and when slaughtered the meat equals the best of beef. It is not impossible that after-war conditions as to meat supply and as to transportation will direct attention to this resource. Musk oxen also are present in large numbers. The black fox is, of course, already a subject of domestic production, and fur-farming promises to constitute a stable industry of the Dominion.

A word now as to Governmental control. Canadian industrial expansion has proceeded chiefly along lines of private initiative and enterprise. The stimulus of individual profit remains in almost every field the most potent force in our development.

Every motive of honour and of interest enjoins that that stimulus be not blighted or destroyed. There is no spirit of confiscation abroad among Canadian people or Canadian public men. Such of our resources as from time to time pass from public ownership into private hands are thereafter subjected to control only that waste and the locking-up for selfish and speculative ends may be avoided, and by no means that their legitimate earning power may be checked. The dictates of wise policy have suggested that our invaluable water-powers—an asset of a clearly distinctive character—should be to the utmost possible extent not only state-owned and controlled, but state-developed and operated. All the arguments that go to support Government monopoly apply with peculiar force to water-powers. The long years that are required in the production of a forest crop render forest management also a proper sphere of Government activity. But private enterprise has and will have in Canada abundant opportunity. No just right of invested capital is now being disturbed or will be disturbed. While our people realize that in the evolution of industry the tendency is, in many spheres at least, for the units to collect and grow larger and larger, ultimately maturing by slow degrees into state proprietorship and operation, still, while that is realized, there is no spirit of rampant or headlong Socialism in possession of the Canadian mind. There will always be British fair play. Capital is as safe in Canada as it is in any other country on earth.

I have recounted some of the material resources to which the Dominion is heir, but I would fail indeed to

represent that country if I did not tell you of another inheritance that she prizes more than all the rest: the full free stature of nationhood, with equality of citizenship and equality of opportunity into which she has grown under the ægis of the British Crown. That heritage is the Ark of the Covenant to Canada as to every British community, and every piece and pillar, every line and letter of it she will guard with her life. And let me say this more, and I am a proud man to say it now at the very hour of destiny when the truth that I express means the most: Canada is a faithful child of these islands. Crossed with the blood of your great ally France, and influenced industrially by the almost overwhelming current of the vast Republic that surges to the south, Canada none the less is British, sternly, dependably British. In feeling, and in thought, in sentiment, in aspiration in the sense of her mission in this world, Canada is British—never more British than now. She believes and always wants to believe that Britain stands for real democracy. That country is unitedly, determinately democratic. She hopes and expects that out of the welter of this war of democracy, a war in which she strains, as in honour she must, every fibre and muscle of her half-grown frame—she hopes that out of it all there will come not so much avenues to greater masses of wealth, but a wider area of opportunity, an improvement of living conditions, a higher general conception of public duty, a releasing of human energy for the pursuits of science and art—an advance for democracy all round over the whole universal line, and an advance commensurate with the cost.



E. W. BEATTY

THE YOUTHFUL PRESIDENT OF THE CANADIAN PACIFIC RAILWAY

BY JAMES GRANT



WHEN the late Jim Hill formed his little syndicate to build the Canadian Pacific Railway he first counted on the fingers of his two hands the men he wanted as his partners.

They must have money and nerve. They must have enough imagination to see a future for the Canadian Pacific Railway and enough commonsense to keep the imagination in check.

One of the men he ticked off on his fingers was Henry Beatty, of Thorold, Ontario. He wrote Beatty urging him to "come in". Beatty screwed up his eyebrows, pondered and replied:

"No."

"Turning down the chance of a lifetime!" said someone. "Man! Think of it! The chance of a lifetime!"

"Hm!" said Henry Beatty, clearing his throat. "Maybe so. Maybe so."

He mailed the letter to Jim Hill turning down the proposition—and to-day his son, Edward Wentworth Beatty—K.C., by the way—is President of the Canadian Pacific Railway Company! Which shows there are more ways of catching an elephant than one.

II.

It is not often in looking into the history of men in great positions in Canada that one has to look at the preceding generation. Uncommon men in Canada seem to leap up from nowhere, burn brilliantly for a time, illuminating the sphere of their activity, and then drop—like spent

flares, leaving no afterglow. Not so the new and youthful President of the Canadian Pacific Railway. Distinction in this instance seems to run from generation to generation, a family matter. The story of Edward Wentworth Beatty begins with Henry Beatty, of Thorold, Ontario—the canal village, as it was in those days, where the son was born.

The stock for this Canadian family came from Ireland, from Coote Hill, near the border of the county of Monahan. It came with no blare of trumpets, but quietly, not to say obscurely, as befits those who propose to surprise fortune in her sleep.

This first Canadian Beatty was Henry. No comedy-making countryman, so far as I can make out, no temperamental trifter with life, but a well-knit, healthy, young man who had dreamed that care, hard work and enterprise could conquer almost anything. In the mountains of British Columbia he made his first tests of the theory. Threading mountain gorges or high defiles, in snow and in ice-water rivers, scrambling up the walls of the precipice and over the still thighs and hunched shoulders of the inscrutable mountains, he hunted fortune—and found it! And when he had made sure of it, came away satisfied. He had now his capital.

So he settled in Thorold, with the canal for neighbour, and awaited opportunity. His wife was a Canadian girl, Harriet Powell. The son Edward Wentworth was born in 1877. In those days he suggested no thought

of the Canadian Pacific Railway. Beatty, senior, was himself a young man, still with a determination to find something useful in the world to do.

The Beatty family, father and son, illustrate better perhaps than anything else one of the best traits in Canadian character. Theirs was not that feverish ambition that created a great proportion of the successful men of the United States. The almost hysterical craving for "giving the other fellow the dust", for "climbing", for showy success and for sensational grandstand plays which marks the pioneers in a new country, was unknown in the Beatty household. They were believers, it seems, first in the importance of a sound body, and all that that implies; cleanliness, sobriety, games, but never mere excitement for excitement's sake. When other people were panicky the Beatty stock was cool, almost cold. According to those who knew that Thorold family, Henry Beatty and E. W. Beatty his son, were known for their reliability, steadiness and clear-headedness. Geniuses? Apparently not. The mark of the house was the possession of that jewel of jewels, judgment.

Henry Beatty had cousins in the shipping business at Sarnia. This for a time was Henry's best opportunity. He became one of the Beatty Sarnia Line, and when the supplies for the Canadian Pacific Railway were being shipped to Thunder Bay, the vessels of the Beatty Line carried them, or a large part of them. The line prospered and under Henry Beatty's direction extended its operations by the purchase of excellent new steamers for the Great Lakes trade.

Henry Beatty's personal connection with the powerful figures behind the Canadian Pacific Railway did not end with his rejection of Jim Hill's invitation to join the syndicate. He was marked, among those giants as a fellow giant to be coaxed into the work one day. And through his steamship association they finally did secure his aid. He moved his headquarters to

Toronto, and it is not many years ago that the reporters, going their rounds through the musty offices in the old Union Station, used to drop in for news at the desk of the General Superintendent of Steamship Service. Let it be added that they learned little. Speech, with the Beattys, father and son, is more precious than money and to be used with wit and economy.

III.

Henry Beatty's connection with the Canadian Pacific Railway began and ended with the building up of the fleet. His son's connection opened with a totally different department.

Apparently "Eddie" Beatty at school was no miracle. It is true he won the Governor-General's medal at the Model School twice, but for all that he impressed his elders more by his all-round qualities and his steadiness than by anything else. At Harbor Collegiate, Upper Canada College, the University of Toronto and Osgoode Hall he pursued learning with quiet certainty that she dare not escape him. In none of these places was he specially brilliant. Showy records were not his. Feverish feats of memory or research were not on his schedule. He developed year by year all the symptoms of an intelligent, reliable, unemotional and honest judgment. He played football and played well. The 'Varsity team relied more than once on "Eddie" Beatty to hold up a big end of the game; and never once, they say, did he let 'Varsity down. His football, like his word, or his work in the lecture-room, was reliable. He did nothing for effect. He was blunt, sincere and a bit witty. "He courted nobody," said a friend of his to the writer, "but friends clustered about him by degrees, and they were usually men of some account!"

He first practised law in the office of McCarthy, Osler, Hoskin & Creelman. Like any other law student he filed writs and licked law stamps and swapped stories in the cool rotunda of old Osgoode Hall, or in the dressing-room. Like any other young law-



Mr. Edward Wentworth Beatty, K.C., who at the age of forty-one became President of the Canadian Pacific Railway

yer, he made his first efforts before the Master-in-Chambers, or in Single Court, and received his first snubbings and rebukes from tart old judges jealous, perhaps, of his youth.

When A. R. Creelman was made chief solicitor of the Canadian Pacific Railway, Beatty went to Montreal with him as assistant. This was in 1901, when Beatty was twenty-three. In 1914 he succeeded Mr. Creelman as general counsel; in 1914 he was appointed Vice-President, and in 1916 a Director.

Three things, they say, E. W. Beatty hates: golf, bridge and camouflage. He is too busy and, I imagine, too sincere for what perhaps seem to him to be trifles. For physical recreation he plays handball, and no better testimony to the value of the game could be asked than his healthy figure. For mental recreation he reads history, that of the Middle Ages by preference.

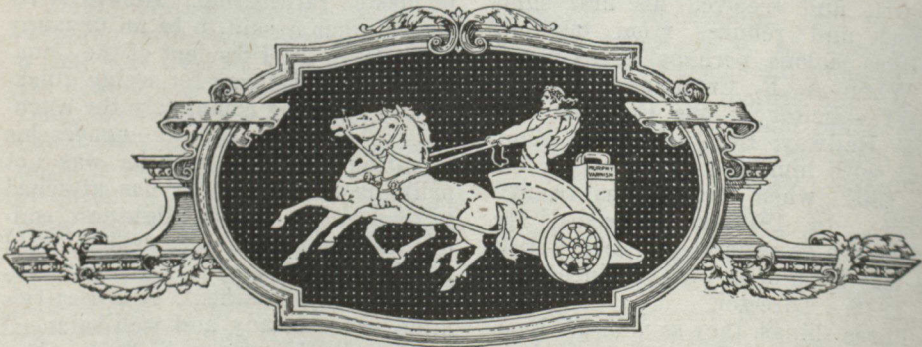
The marvellous thing is how a lawyer of forty-one should have been able to master railroading. Herein is revealed what is said to be an uncanny capacity in the President of the Canadian Pacific Railway for seeing quickly and grasping completely the essentials of whatever subject engages his attention. I have said he was not brilliant because usage has attached to that word a sense of lightness, suddenness, irresponsibility which could not be tolerated in a Canadian Pacific Railway President. And Beatty's mind is too steady and well-balanced an organization ever to be flashy. But it is illumined nevertheless by remarkably quick faculties of perception and good judgment.

He was able, through handling the legal work of the Canadian Pacific Railway, to learn the essentials of railroading. An accident case, in his junior days, led him to study the organization of the divisions: This other

case involving, say, a question of patents, compelled him to study the mechanical principle of engines. Operating department, traffic department, finance, steamships, hotels, each has work for the law department sooner or later, and in obtaining the law department's advice, it paid—at least in Beatty's case—by teaching Beatty its secrets. What is more complex to the outsider than the schedule of freight rates sanctioned by the Government? Yet the general counsel of the Canadian Pacific Railway must be as able to thread its intricacies as to understand the work of the yard-master's clerk.

Thus the essentials of railroading came into Beatty's mind and remained to make him, to-day, one of the great men in the industrial or commercial world. His greatness is not confined to Canada, for his outlook and influence are world-wide.

Far-reaching and intricate problems face him. Questions of the world's money markets, probable economic developments, depressions or periods of activity in the commercial world. To all of these he brings his unusual mental equipment. That this is so concerns Canada quite as much as it concerns the Canadian Pacific Railway. The period of reconstruction has now commenced. Complex questions face the Dominion, and in their solution the Canadian Pacific Railway has almost as great a part to play as a government. The shoulders of the emperors and statesmen bear great burdens in time of war, but in time of peace the greater strain, at least in democratic countries, falls on the captains of industry and the marshals of finance. Beatty, one may say, is a marshal of finance, a captain of industry, a brigadier of trade—all in one!



SIR EDMUND WALKER'S COLLECTION OF ART

BY NEWTON MacTAVISH



OR many years Sir Edmund Walker has taken an active, even authoritative, interest in all things pertaining to art in Canada. Much of his authority he derives from the chairmanship of the Fine Arts Council and the National Gallery of Canada, while his interest comes from an innate love of art in general and early and late study of artistic achievement the world over.

Until about twelve years ago but very little money went from the Dominion treasury for any purpose of art, and the National Gallery, composed of a meagre collection of pictures, was exhibited under wretched surroundings in the old Fisheries Building. Honourable Sydney Fisher, while temporarily in control, created a body known as the Advisory Arts Council, with Sir George Drummond as chairman, Senator Boyer as secretary, and Sir Edmund Walker as the remaining member. They were to advise the Dominion Government in matters of art, and were to dispense the small sum of \$10,000 annually in purchasing works of art for the National Gallery. The Victoria Memorial Museum was being built, and a portion of that building was to be set apart for the National Gallery. Sir George Drummond, with his splendid collection of pictures, did not think that anything worth while could be done with so paltry a sum and frankly left the matter in the hands of the other

members of the Commission. Sir Edmund Walker contended that they could at least do something with Canadian art, that there were some fine modern paintings, other than Canadian, quite within reach, and that the way to get a larger grant was by showing what could be done with a small one. Sir George Drummond died before they had made much progress. He was succeeded by Dr. F. J. Shepherd, now chairman of the Montreal Art Association. Sir Edmund Walker became chairman of the Advisory Arts Council. Almost immediately the grant was increased to \$25,000 annually, then to \$50,000, and then to \$100,000. As soon as the pictures were moved into the Victoria Museum building the Council pressed for the creation of a special Commission for the National Gallery, and they thus became at one time trustees of the National Gallery of Canada and members of the Advisory Arts Council, of both of which bodies Sir Edmund is still chairman. When the war came the grant, at the Council's own suggestion, was cut down to \$25,000, as it was clear that the country could not afford to spend large sums which would be sent out of the country, but with utter ruthlessness the entire grant, except the cost of maintenance, was cancelled in 1918. Fortunately in that year, however, Sir Edmund was able to control part of a large amount of money raised in England for war memorials in painting and statuary, and thus to give some of the



In Tuscany

An example of British painting, by Turner, in Sir Edmund Walker's collection

Canadian artists a chance to do work both in France and at home. This work will tend to preserve the history of what Canada has accomplished in the many activities of war from the farm to the field of battle.

If Sir Edmund Walker has taken so keen an interest in art as it affects the public, it is only natural to wonder what interest he has taken in art as it affects himself and his home life. Most persons capable of pronouncing judgment would say that he has not made for himself a great collection of art. One reason why his collection is not great is the fact that as wealth goes nowadays he is not wealthy. Another reason is his belief that art in private houses should be used to serve an artistic purpose; that a private house should not be a repository for art, except in the case of prints or lithographs, which for the sake of preservation are kept best in cabinets, in short, that objects of artistic merit

should be used in private houses only as decorations. Notwithstanding this belief and practice, Sir Edmund is by instinct a collector, and as a result of his desires in this respect, he largely is responsible for the splendid Art Museum of Toronto, which now is being completed, and the Royal Ontario Museum, in the same city, which is regarded as one of the very best museums on this continent.

Sir Edmund's home is on St. George Street, Toronto. That city contains many much more pretentious residences, but there are not many that are as interesting or as homelike. Objects of artistic merit lie about or hang on the walls, in number just sufficient to give an impression of purpose without any feeling of cluttering. Faience, mostly Dutch, decorates the plate-rail in the dining-room, for instance, and on the walls of the long hallway at the entrance hang prints and etchings. Old pieces of



Evening

An example of French painting, by Daubigny, in Sir Edmund Walker's collection



L'orage

An example of French painting, by Diaz, in Sir Edmund Walker's collection



Evening, Dordrecht

An example of Dutch painting, by Jacob Maris, in Sir Edmund Walker's collection

bronze that reposed at one time as objects of veneration in Chinese temples decorate the mantelpiece in the drawing-room. Chinese and other rugs from the Orient cover the floor. Specimens of early Chinese pottery add interest and spots of colour to the space above the cornice from which depend a number of paintings of considerable intrinsic value and artistic importance. Indeed, for paintings room has been made in all parts of the house. It is to these paintings that we shall for the moment direct our attention.

Sir Edmund has some excellent small examples of early masters, including two by Francesco Guardi, two by Adrian van Ostade, two by Daniel de Koninck, and one by Angelica

Kauffmann. He has fine examples also of Crome, Aert van der Neer, R. P. Bonington, Richard Brakenbrugh and John Sell Cotman.

But just here we shall not discuss any painting that antedates the time of Diaz, who was born a little more than one hundred years ago, and is represented in every comprehensive collection of good art. The painting now owned by Sir Edmund Walker is an exceptionally fine example of his work. Like much of this modern master's painting, it is low in key, and depicts a storm breaking over a stretch of moorland. It is remarkable for the colour it reveals under a strong light and for the drenched appearance of the landscape.

Next to the Diaz in importance comes an almost contemporary picture by Daubigny, a landscape in the dusk of evening and in the style that has made the work of this distinguished Frenchman famous for more than half a century.

In the drawing-room there are other examples of Barbizon and later French painters: two by Daubigny, one by Diaz, and single examples of Julien Duprez, Harpignies, Boudin, Monticelli, Fantin-Latour, Théodule Ribot and L'hermitte.

The work of Johannes Weissenbruch, a distinguished Dutch painter, who was born in 1824, has appealed without much evidence of discrimination, and in general, to Canadians who buy pictures. But Weissenbruch is only one of perhaps a dozen modern Dutch painters who have had in Can-

ada a considerable market for their work. Jurres, the Marises, Bosboom, and Izraels have many friends in this country, and in Sir Edmund's collection one finds small, yet splendid, examples by all except Izraels, as well as by Bauer, Tholen, Blommers, Mauve and De Zwart. Whatever criticism might be made of Weissenbruch's usual achievement, no one could deny the sheer beauty of tone in the water-colour called "The Washerwoman", owned by Sir Edmund. It outlines the fringe of a village and suggests an old woman laying out a washing. But it is the cool, quiet loveliness of the grays with faint tincturing greens that gives it an unusual quality and marks it as a work of real artistic merit. The Jacob Maris also has been well chosen. It is a marine, not large, but soundly painted in rich, vibrating colours.



The Mediterranean, from Tangier

An example of British painting, by Lavery, in Sir Edmund Walker's collection



The Washerwoman

An example of Dutch painting, by Weissenbruch, in Sir Edmund Walker's collection

Bosboom's specialty is church interiors, with results that are interesting architecturally and peculiarly attractive owing to their almost monochromatic tonality. Many of them are small, and of these Sir Edmund possesses several, very fine examples of unusually subtle and refined art. So much for the Dutchmen.

Of the British artists, the most attractive paintings are "The Mediterranean from Tangier", by Sir John Lavery; "The Spanish Gypsy", by Gerald Festus Kelly, and two miniature landscapes in water-colours by Turner. The Turners were bought a few years ago from the widow of Reverend C. E. Thomson, of West Toronto, to whose sister they were presented about the middle of last century by Colonel Johnson, well-known as a friend of Turner. Sir Edmund removed them from an old album that had been used for preserving bits of amateur verse, sketches and pictures

characteristic of early Victorian times. By being thus secluded from sunlight the colours retain their original vividness. Although they are only a few inches square they reveal all Turner's distinguishing qualities, his peculiar choice of colours and idealization of landscape.

The Lavery is a marine, delicately opalescent, a study in tone, with the slightly contrasting shades melting almost imperceptibly into one another, an effect frequently essayed by this artist. It is an interesting example of Lavery's meandering from portrait and figure painting, although it may not display his most virile style. It is but one of several by Lavery owned by Sir Edmund.

A large and most ambitious composition in the collection is "The Troubadour", by Professor Hermann Philips, who ranks among the best of living painters who are seriously endeavouring to carry on the traditions

of the Italian romantic school of painting. In this picture his colour is rich and luscious, the paint very thickly applied, yet carefully modelled; and the result, although it might be displeasing to the ultra-modern, is satisfactory to all who can find some beauty in art that is in accordance with old and acknowledged standards.

Apparently no attempt has been made to find room for any general display of paintings by Canadians, but there are several excellent examples. Of these the most notable is a large canvas by Horatio Walker, R.C.A., "Evening, Ile D'Orleans". Although this painter is a native of the Province of Ontario, with a permanent residence on the Island of Orleans, his work is much more generously appreciated in New York than in either Toronto or Montreal. This is due perhaps to the fact that for many years he entirely neglected the home market.

At the first exhibition, about ten years ago, of the Canadian Art Club, of which he has been a member ever since, he exhibited a number of paintings and since that time work of his has been seen at most of the important exhibitions in Canada. One of his largest canvases is in the National Gallery at Ottawa, but it is the exception to find any of his work in private collections, even of the



The Troubadour
An example of Italian painting, by Herman Philips, in Sir Edmund Walker's collection



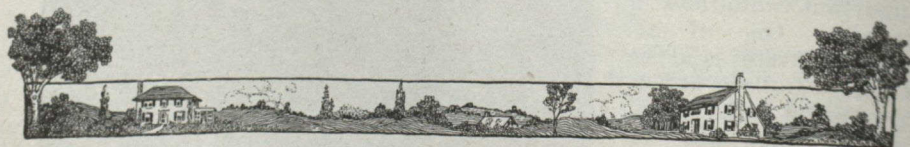
Isle d'Orleans

An example of Canadian painting, by Horatio Walker, in Sir Edmund Walker's collection

wealthy. An oil painting of his of medium size costs about five thousand dollars, a sum that collectors in Canada spend readily enough for the work of a foreigner, but cling to with great tenacity when the work of a Canadian is being considered, even though the Canadian be a much better artist.

While Sir Edmund in private life is a discriminating collector of paintings, he might be classed as an extensive collector of prints and engravings, for specimens in these branches of art can be put away in portfolios

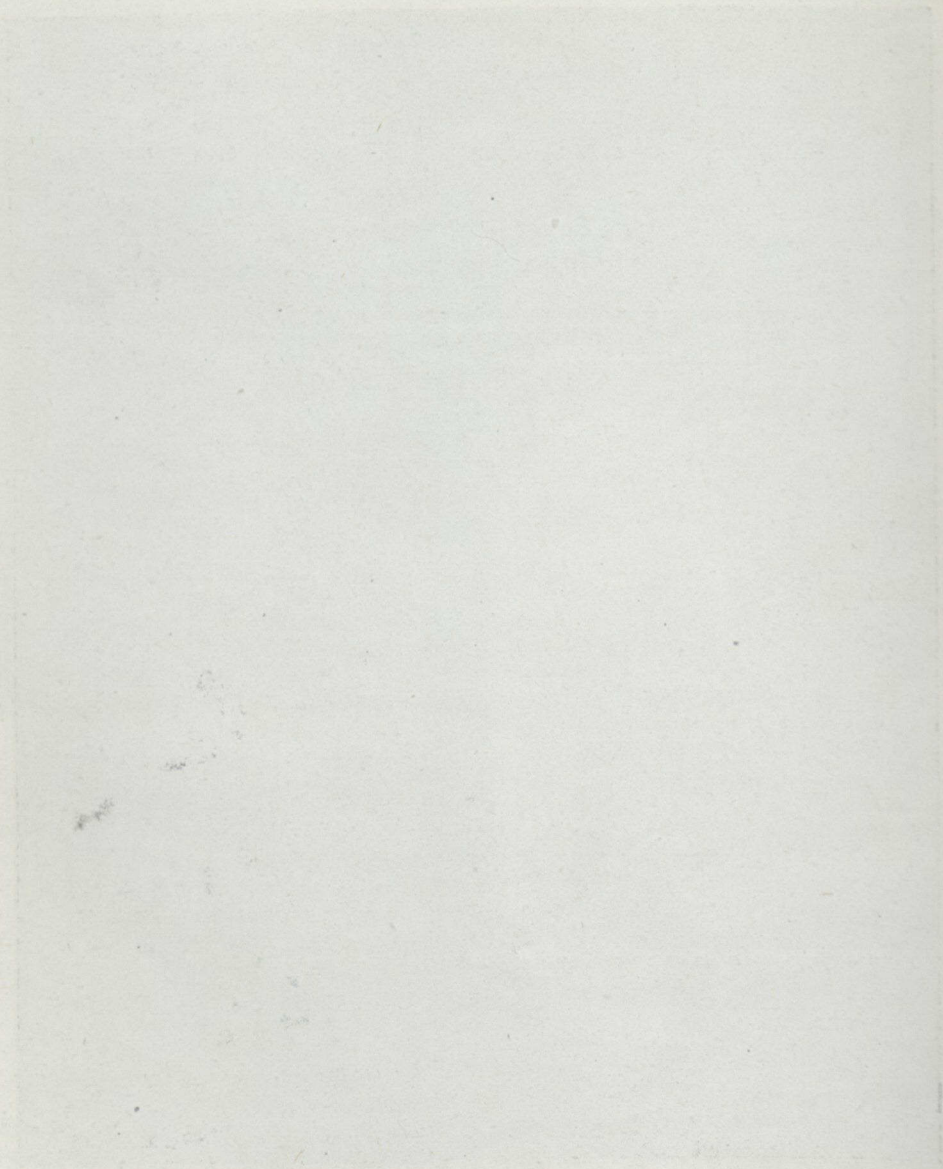
or in cabinets, with folding doors, and taken out or opened whenever the owner or any one interested wishes to see them. The latter is Sir Edmund's method, but he uses as decorations a few pieces on his walls, a Japanese print or two, for example, or perhaps an etching by Zorn, Whistler, or even Rembrandt. The cabinet contains more than fifty etchings by Rembrandt, and many others by van Ostades, Whistler, Seymour Hadens and Millet. But the mass of his now extensive collection of prints is not seen at all unless spécialement exposed.





A CHURCH INTERIOR

From the Painting by Bosboom,
in Sir Edmund Walker's
private collection



HELIOTROPE

BY ISABEL ECCLESTONE MACKAY

AUTHOR OF "UP THE HILL AND OVER"

CHAPTER III.



It was not until the next morning that we found the opportunity to carry out Gregory's idea of showing the baby slip to Miss Emsley. We told her nothing of its history and merely asked her to use her eyes.

The girl was obviously interested. She took up the little dress tenderly, in the way nice women always touch baby things, and examined it in silence. When she spoke I was modestly pleased that her conclusions came so near my own.

"Do you want me to tell you just what I think?" she asked. "Or must I tell you why I think it?"

"Both, if possible. But what you think, anyway, if only *because*."

She smiled. "It is not new. It has been laid away in a box or drawer for years. It has been washed and ironed but not often. The baby it was made for could not have worn it long. It is made of cheap flannelette, but it is stitched as beautifully as if it were of the finest cambric. Look at these tiny stitches; every one is put in by hand by someone who loved to do it and who knew how also. I should say it was made by the mother. No one would pay to have such fine work put on cheap material and no one but a mother would think the doing of it worth while. It has been a work of love. The only reason it is not made of the finest fabric must have been poverty. A poor mother,

then, made and kept it after—after it wasn't needed any more. I think, too, it must have been made for a first baby—the mother didn't know how babies grow—see it is so tiny!"

I declare there were tears in the girl's eyes!

"You reason very well," said Gregory thoughtfully. "Is that all?"

"Yes—except that the dress is faintly scented."

"Scented! with what?"

"Miss Emsley snuffed delicately. "Heliotrope, I think."

"Oh, dash this cold!" I groaned. "However did I come to miss that?"

Gregory paid no attention to my lamentations. His keen eye had brightened. He called the girl back as she was leaving the room and handed her the letter and envelope brought us the afternoon before by Macrae.

"Take this away, quite away, from the dress," he ordered, "and see if there is any trace of the same odour upon it?"

The girl did as directed, and her verdict was "no".

Gregory then gave her the empty envelope dropped by Miss Hampden with the same result. Then he handed the box containing the paper-wrapped coins, and to our surprise she replied instantly:

"Yes, it is here. It is the same perfume. I smell it, quite plainly."

Gregory jumped up. "By Jove!" he exclaimed. "Oh, dash all people without noses! We might have missed

this if it had not been for a woman. Now, Miss Emsley, I want you to do something for me. Take this card, which will admit you, and take a taxi down to No. 3 Richly Road, and go through the house, especially the drawers and cupboards, and see if you can tell us whether Mrs. Simons used heliotrope perfume—and hurry up."

The girl, delighted to be of use, did hurry up, but when she returned she looked a trifle crestfallen. There was no trace of perfume, heliotrope or otherwise, at No. 3 Richly Road.

Gregory was plainly delighted. "Glorious!" he declared. As for me I felt so chagrined at having missed so obvious a clue that I said nothing at all.

"Now," began Gregory, "we have something which to the meanest intelligence—"

But he got no further, for the office-boy, entering, announced Mr. Carlton Smith to see Mr. Hubbard. Miss Emsley returned to her typing, and Mr. Carlton Smith came in. He was a man whom I knew very slightly, a rather heavy type, somewhat pompous and old-fashioned. When I introduced Gregory, he looked embarrassed and intimidated somewhat clumsily that he wished to see me privately.

"But if it is a matter in which you wish the firm to help you," I told him, "Gregory is quite as necessary as I am, more so, in fact. But if it is anything else—"

"No, no, that is—an—it is in a sense a professional matter. But confidential, very."

I intimated that our clients' affairs were always held in strict confidence.

"If the police get hold of it, you know," explained Carlton Smith, "it would be deuced awkward. But my wife is worried and she wants me to get your opinion. It's about a girl—a maid my wife employed in whom she took a great interest—a rather superior type. Two years ago this girl left us to be married. She did well, married the foreman of one of the big fruit farms near here. Well,

this girl came to my wife last Saturday morning in great trouble. Her story is this: When she was a very young girl—several years before she came to us—she had been unfortunate. There was, in fact, a child. The child was placed with a woman to look after, and Jennie (that's the girl's name) went to work to support it. She really is a rather fine girl. Not at all the type you would expect. Well, the child died. Jennie buried all that part of her life and began over. She was clever and intelligent and has been very happy and respected in her married life. But—she didn't tell her husband! She said she just made up her mind that she had paid for her folly and had a right to a chance of happiness. Now, in some way this woman learned of Jennie's prosperity and attempted blackmail. The girl had sense enough to see that if she once paid money there was an end to her peace. She came and told my wife the whole story, but not before she had written a letter to the woman—a letter written in the white heat of fear and anger, threatening to kill herself and the blackmailer, too, if her husband were told—"

"I think we have the letter here," said Gregory casually.

"Great Scott! Do the police know?"

"They have seen the letter."

"Well, I'm sorry for the girl. Of course, she didn't kill the woman. When she heard of the death, she remembered the threat in her letter and came to my wife again this morning in a great way, frightened to death, naturally. For, as ill luck will have it, she was in town all the afternoon of the murder."

"She does not live in town, then?"

"No. But the fruit farm of which her husband is foreman is near Glenvale, just an hour's run out from here. She comes in often to shop."

"That would account for the post-mark of Central station. But surely the girl is safe enough? The time of the murder is pretty well substantiated. Where was she between four and six on Monday afternoon?"

"Search me!" said Carlton Smith helplessly. "She says she doesn't know. Saturday when she came in to see my wife she was far too upset to do her usual shopping, so she came in again on Monday to do it. Had lunch with a friend, but left her about two o'clock and spent the rest of the afternoon getting through her shopping list. How women spend so much time in these stores beats me. She was in the big departmental stores mostly, no one would be likely to remember her. She went home on the 6.30 local."

"I wish I could see your wife for a moment," said Gregory, after a thoughtful pause.

"Why, you can, if you like. She's down there now in the car waiting for me. I'll go and tell her you want her."

Mrs. Carlton Smith was exactly what a good wife should be—the opposite of her husband. Where he was big and heavy and stiff she was little and light and genial. She was pretty too, and had the eyes which always go with a kind heart.

"We won't keep you long. Mrs. Smith," said Gregory, "but there is just a question or two—is your former maid fond of using perfume?"

She looked surprised. "Perfume? No, I wouldn't have a maid who used perfume. But she may have taken to it since she left me."

"Do you remember her ever showing any fondness for any particular flower?"

"I remember that she was fond of all flowers, especially roses. But—"

"We are just working in the dark, Mrs. Smith. So do not wonder if our questions seem senseless. What I particularly want to know is why you are so certain that this girl is as innocent as she protests? We know that she made a threat and we know that she had the opportunity for carrying out that threat—"

"Yes, but you don't know Jennie. I do, and I know that the thing is absolutely impossible."

"Why?"

"Why?—because it is."

"An excellent reason," said Gregory, smiling, "but hardly such as would appeal to the police."

"The police—heavens! Arthur said you weren't the *police*. Arthur dear, run down and get my bag. I left it in the car seat. There's a photo of Jennie in it. When Mr. Gregory sees her chin, he won't go suspecting her of murder and sudden death. As a matter of fact," she went on as her husband departed, "I am not sure that the bag is on the seat at all, but I wanted to tell you something that Arthur doesn't know. I went to see this horrible old woman myself. Arthur would have a fit if he guessed it. But Jennie was really in great trouble and I thought I might be able to help, so I just went—"

"When did you go?"

"Let me see—it was on Saturday, two days before the murder, the day Jennie came into town and told me."

"The day she posted the letter?"

"Yes, she posted it before she came to me. She was terribly worked up."

"Well, now, Mrs. Smith, tell us exactly everything you can remember about your visit—all your impressions—everything."

"There is very little to tell. I saw the woman. She was sitting in that very chair with a big gray cat on her knee, a regular grimalkin. She was quite the horriest person I ever met. She was as sleek and cruel and gray as the cat. And she had cat's eyes. But I was pretty angry and I let her have it straight. I told her that Jennie was not without friends, and that if any more was heard of her blackmailing threat she would find herself in the hands of the police. I said rather than have Jennie pay a cent I would tell her husband myself—and—oh, anything I could think of, to show her that she'd made a mistake in going after Jennie. I think I convinced her, too. She looked so hateful."

"Is that all?"

"Yes—at least, it's all about her. She hardly said a word. I did all

the talking. But there was someone else there. The oddest creature! I wasn't going to speak before her but the woman told me not to mind her, that she was almost stone deaf."

"Yes, yes, tell us all about her."

"There isn't anything to tell. She just sat there. She didn't say a word, or make a movement. She got on my nerves. I was glad to get outside again."

"But my dear Mrs. Smith, this may be of the highest importance. Try to remember something about her. What she looked like, how she was dressed."

"Oh, I can't—here comes Arthur, don't give me away to him! She was just an ordinary deaf looking person in a purple bonnet—oh, Arthur, I'm so sorry to have troubled you. The bag was here all the time. Now Mr. Gregory look at that chin."

We looked but we did not see much chin. It was as she had warned us somewhat of a missing quantity. The face was that of an ordinarily pretty girl with intelligent eyes and weak mouth.

"Not exactly the accepted idea of a murderess," agreed Gregory.

"She's just a nice, silly, excitable thing. And if you don't hurry and get this affair cleaned up, she is going to have nervous prostration."

"We'll hurry," I promised, smiling. And it really did look as if things were moving a little; for no sooner were the Carlton Smiths gone than Miss Hampden rang up again. She was plainly excited.

"The strangest thing has happened," she said, "and if there aren't any policemen or anything hanging around, I'd like to come down and tell you about it."

We assured her that we were absolutely *sans* policemen, and as quickly as her small electric brougham would bring her she arrived.

She was looking very pretty, and distinctly happier than when we had last seen her.

"It's a letter," she said without preliminaries—"or rather it isn't a

letter, but it came in an envelope. Look for yourselves and see what you make of it."

At first sight we did not know what to make of it. It consisted of four sheets, torn apparently from a note book or a diary. The paper was old and soiled and the date of the first entry was the 22nd of July, twenty years ago. The contents of the first page were as follows:

July 22nd. Received G.B. one week old. No. 17.

Description—Six pounds, dark, long hands, blue eyes (liable to change), no birthmark.

Mother—Alice Brook.

Father—Not stated.

Pay certain and prompt.

Memo—Find out father.

Note: Similarity in size and coloring to G.B., No. 16.

"Mother's name was Alice Brook," said Miss Hampden, who was watching us read with scarcely suppressed eagerness, and I must have been G. B.—("girl baby" I suppose)—No. 17. Now read the next entry."

The next entry was dated three months later and was very brief:

October 6th.—G.B. No. 16 died last night. Mother not likely to make trouble.

Miss Hampden would not let us linger over this but hurried us on to the next one which was an entry dated the next day:

October 7th.—Mother removed G.B. No. 17. Paid to date. No complications.

Father—John P. Hampden.

Nothing usable at present.

Memo—Showed mother G.B. No. 16 and remarked on similarity to her own child, in view of future possibilities.

Then followed several dates scattered through the intervening years and opposite to them were various addresses.

"These addresses," explained Miss Hampden, "are all addresses of where my father and mother lived at the dates given. She followed them, year by year. And look at the fourth page."

The fourth page was much cleaner and of a different paper. Its date was only two weeks old and opposite

were the cryptic words, "quite feasible. One thousand dollars."

The sordid story seemed plain enough. Gregory and I both shook Miss Hampden's hand in sincere congratulation.

"I don't think you need worry any more about the possibility of your having died in infancy," said Gregory, smiling. "I fancy that babies whose parents paid well stood a fair chance of living under Mrs. Simmons's care, whatever might be said of the others—poor mites! Still our baby-farmer had a long head and the casual resemblance of a perfectly good baby to a dead one was too promising a coincidence to be overlooked. Nothing was wasted in her blackmailing business. Only, she couldn't trust her memory, hence these notes."

"It was a horrible, horrible scheme," said the girl. "And she was a bad woman. I am glad that she is dead. But—if these are pages from her diary—where did they come from?"

"Ah," said Gregory dryly, "where indeed? There are no post-offices in the other world."

"But it didn't come by post," she told us, smiling. "It must have been dropped in the letter box at the house last night. It is not stamped. Yet I found it with the rest of our letters this morning."

Gregory flipped the envelope to me discontentedly. "See what you can make of the writing," he said. "Of course it is apparent at first glance that it has nothing in common with the writing of Mrs. Smith's protégé, and therefore goes far toward letting that young person out. For whoever sent diary-leaves has the rest of the diary and probably all the private memos and papers which the police failed to get. And the person who has those papers is—the person we want to find."

"But why send the leaves to Miss Hampden?"

"There seems only one answer to that. Surely it is the most suggestive thing yet. If only the girl Jennie has received some mysterious mail

also—we can put that problem aside as solved."

"I don't see—" I began.

"Oh, I do," exclaimed Miss Hampden. "You think that the person who has the papers is trying to—to put things right."

"Why?" I asked again.

"Ah," said Gregory, "that is a different question."

"A murderer would hardly be sufficiently altruistic to fling evidence around for the sake of relieving the minds of other people?"

"Oh, I don't know. Some murderers are very altruistic. What about those anarchists who give their lives freely, proud to have killed some oppressor of their countrymen? Some murderers murder and think they do God service. Also the late Mrs. Simmons was undoubtedly due for removal. Still the sending of these pages suggests a lot more than this one shadowy possibility. It suggests that the person with the papers understood the purport of them; knew the uses to which the notes upon them had been put and—by Jove, yes—was not the threatening letter from the murdered woman also delivered by hand—and at night, Miss Hampden?"

"Yes," eagerly. "I see—you think there is a connection there. But why would a person threaten one day and reassure the next?"

"We don't know. There might have been some sort of compulsion—a compulsion removed by the death of the principal. Wait a moment, and I'll call up Mrs. Carlton Smith, for if there is anything in our theory, Jennie may have something fresh to tell us."

He hurried away to the 'phone in his private office, leaving me to inform Miss Hampden of the identity of Jennie and her part in our queer tangle.

We were still talking about it when I saw, through the glass partition, Miss Price come into the outer office. Miss Price, you will remember, was one of the young ladies of whose services Gregory sometimes availed

himself and who was at present personating the girl in blue. She did not wait for the boy to announce her but came straight through, pausing at the door only when she saw that I had a visitor.

"Come in, Miss Price," I said. "Mr. Gregory will be back in a moment. This is Miss Hampden." I introduced the two girls with a word of explanation. Miss Price's worried look brightened.

"This is lucky," she said. "For it is Miss Hampden's business that I am here to tell you about. The police have found out about the encounter of Mr. Maddison and a lady in blue."

Miss Hampden turned a shade paler, and then the colour rushed back into her face in a way that perilously resembled a blush.

"But — Mr. Maddison — he — he didn't —" she stammered.

"Oh, no, he didn't, of course," Miss Price caught her up quickly. "He did his best to twist them up, but in the end did as he was told, and gave them my address. I was getting along beautifully when suddenly one of them, a big-nosed Scotchman named Macrae asked to see the dress I was wearing that afternoon. And I haven't a blue dress to my name. Fancy! I never wear blue. It's my fault. I should have provided one. Mr. Gregory will be angry. I had only a moment to think and I told them it had gone to the cleaner's. They asked which cleaner's, and my only safety was to pretend to be annoyed at their inquisitiveness and refuse to answer. But I offered to show them the dress when it came home. I am out now to get the dress and I thought I had better let you know."

"Why not have the real dress?" suggested Miss Hampden. "We are much of a size and if the fit is not perfect a mere man won't know it. I'll send it around to your address with the hat and bag to match."

"Good idea. Then if they go farther, Mr. Maddison can swear to the costume without hurting his conscience. He can say it was too dark

to swear to the face. But—has it ever been to the cleaner's?"

"No. It is almost new."

Both girls thought quickly and Miss Hampden found the solution first.

"I'll spill something on the front of it," she said, "and have it taken out with gasoline. That will give the proper 'cleaned' effect and even brand new clothes have things spilled on them."

"That ought to be all right," said Miss Price thoughtfully. "And I'll do my very best. I don't quite see how they can go behind both Mr. Maddison and me. But I ought to tell you that the big-nosed Scotchman is suspicious. He doesn't know what it is, but he has a feeling that there is a nigger in the fence somewhere. I think he even started out to follow me but, well, there's where I shine. I never saw a man yet who could follow me when I don't want to be followed. I—"

"My dear girl," interrupted Gregory from the door, "if I were not so busy I would make that a bet. Some day when we want livening up, you shall be the hare and I shall be the hounds with five pounds of the best chocolates on the result. In the meantime," turning to me, "I have got in touch with Mrs. Smith who was just setting out to come down here with the news that Jennie has received an envelope containing the one piece of incriminating evidence which would have substantiated Mrs. Simmons's word had she carried out her threat of informing the girl's husband. No doubt, if we only knew of them, there are many other women, and men too, who have received mysterious mail of a nature calculated to relieve their minds. Whoever has the dead woman's papers is making good use of them."

"Then," said Miss Hampden fervently, "I just hope that he or she or whoever it is doesn't get caught."

"My dear young lady, your hope does you honour." Gregory's tone was grim, "but remember someone will

have to answer for the death of Mrs. Simmons, bad as she was. And if we don't get the guilty party, the police will get an innocent one—the girl Jennie, perhaps, or perhaps—you!”

Miss Hampden choked back an “oh” which sounded very like a frightened sob. The other girl put a capable hand on her arm and her eyes shot lightning at Gregory.

“What d’you want to frighten her for?” she asked belligerently.

“I don’t want to frighten her. But I want you too to realize that there is real danger in this affair. Now hurry away and repair your blunder about the blue dress—if Macrae is suspicious, better make love to him. He isn’t half so bad as he looks.”

As the door closed after them Gregory sat down in his chair with a gesture of resolution.

“We’ve got to get somebody soon,” he said, “or Macrae will certainly get that girl. He is more than suspicious. I was talking to him on the ’phone just now. I don’t think they could possibly convict her but they could ruin her life quite easily. To be mixed up in a scandalous murder case would be almost as bad as conviction. Her mother too—and her father—it would ruin them all. Get out your notes and let’s shake them through a sieve and see what remains.”

“Let’s begin by eliminating,” I suggested. “If we count Miss Hampden out that does away with all the evidence of the little girl about the blue lady. If we count out the girl Jennie that disposes of the threatening letter in the coal scuttle. It seems to me that, excepting the fact that we know who and what the dead woman was, we are not very much ‘forwarder.’ The clues are still the first clues—the infant’s slip and the box of wrapped-up coins.”

“And the scent of flowers—don’t forget that—that heliotrope scent is our winner, or I’ve missed my vocation.”

“Lots of people use perfume.”

“But few people commit murder. So if we come across someone who

had the opportunity for committing murder and who uses the particular perfume, we have a striking combination not likely to be due to chance. Now let us both go over these notes with these three clues in mind and see if there is the slightest item bearing upon any one of them. This is where you shine.”

But I was not to be allowed to shine, just yet. No sooner had we got nicely settled down to a studious perusal of my record of the case than the office boy informed us Macrae was in the outer office.

“We can’t see him,” said Gregory crossly.

“Hoots, mon!” came Macrae’s voice in its broadest Scots, “ye canna help seein’ me, if ye’ve e’en in yer heid.”

The big Scot had taken no chances and had followed the office boy without ceremony.

“You’re a confounded nuisance,” declared the irate Gregory, “and a word in your ear, Mac, if you’ve got anything to say, say it in English, for I haven’t got time for foreign languages to-day.”

“Sure, Mike,” said Macrae cheerfully. “I’ll be as English as never was. And it’s good news I’m givin’ you. I’ve got the blue girl!”

“What!” exclaimed Gregory, and “Where?” stupidly, from me.

“When I say I’ve got her, I’m not meaning that I’ve just exactly laid hands on the lassie, but I ken where she is and I’m on my way now to the chief for a warrant.”

“Tell us about it,” said Gregory quietly.

“Well, you’ll hae to excuse a bit Scotch, for I’m fair excitit. It all began frae that notice in the paper I telt ye aboot over the ’phone. I’m thinkin’ it’s no news to ye—though why you kept it so canny, I can’t see. I went to look over the young man and found him verra obligin’. Yes, the leddy had answered the advertisement. Yes, the leddy had recovered her property. No, he didn’t know the leddy. But, after a bit pressin’, he could give me her name and address.

Did she wear blue? He thought mebbly it was blue. And all the time he was being so nice to the police he was lookin' as if he would like to hang for the murder of us. It made me just fair anxious to see that lassie."

"So I went and I saw her. And she wasn't much to see, forby. But she was nice to the police too, and she answered all I speered at her quite polite. And then it came to me that mebbly yon blue dress wouldn't say so much but might tell the more. So I asked to see the dress and my leddy just forgot all her pretty nice story and stared at me as if I'd asked to see a sea serpent. And it came over me that she wasn't the colour of a lassie to wear blue at all! As you've seen her you'll remember that she's a lassie for brown and pinks like. And the blue dress was at the cleaner's! Well, I just thocht I'd find out a bit more, quiet like, but she shook me—just as easy. She's a clever lass. It was straight chance and a longin' to see you that brought me in a taxi to the door downstairs just as the lost one hersel' and another lassie were comin' oot. I kenned the driver of my taxi and I wasn't long in takin' his place at the wheel. The other lassie had an electric brougham waiting and as she stepped in I heard her say:

"I'll send it right down as soon as I get it ready."

"And then they said 'Good-bye,' both looking rather worried. I knew where the Price lassie lived, so I followed the other and I just camped around waiting to see what she was going to 'send down.' It wasn't so long before a maid came oot with one of those big dress boxes in one hand and a hat box in the other. She was in a hurry and my taxi was right on hand. Seeing she was so burdened, I helped her in, but, losh! I was that clumsy! I almost fell over the dress box and knocked off the cover to that extent I couldn't help seein' what was intilt—and what was intilt was a fine blue dress and a fine blue hat in the hat-bot, forby, and who d'y think was the leddy of the brougham? Who

indeed but the only daughter of John P. Hampden—and as pretty a lass as ever a man told a lee about!"

When Macrae had finished his triumphant recital there was silence in the office for a little. For myself I was genuinely dismayed. Finally Gregory spoke.

"You think this Miss Hampden was the lady in blue?"

"Mon, I'm sure of it."

"And you think that Miss Price, for some unknown reason, is acting for her?"

"I do, but I think the reason is not unknown—to present company."

Gregory slapped down his pencil with a bang. "You're right, Mac. You see we thought you would be just smart enough to do what you've done and we didn't want Miss Hampden to come in. She has absolutely nothing to do with the affair of the murder. I am sincerely convinced of that. And think what it would mean to associate her with it—even for an hour. We want to find the guilty, not to shame the innocent."

"If she's the one the wee lassie saw runnin' oot of the murder hoose there's enough against her to arrest her a dozen times," said our Scot stubbornly.

Gregory shrugged. "That's all right. But I tell you she has an explanation which absolutely explains."

"She might hae that, an' I wad like to hear it."

"You would, but I haven't time to tell it to you. There simply isn't a moment to lose. So you'll have to take my word for it."

Macrae arose. "I must be gettin' along. I must make my report to the chief."

"No, you won't, Macrae, you know the papers are worrying the chief to do something—arrest somebody. He might arrest somebody and be very sorry afterwards. You know Hubbard and I are not the sentimental kind who take chances on letting a criminal escape. But we want to get the real criminal—not an unfortunate girl. Have a heart, man, we've simply

got to keep little Miss Hampden out."

The big Scot looked moved but unconvinced and murmured something about his duty.

"I'll tell you what I'll do," said Gregory. "Give us twenty-four hours to find the murderer, and I'll promise that you'll be in at the end. You needn't talk about duty. You haven't any duty which calls you to go around making innocent people miserable. The girl isn't going to run away. Give us twenty-four hours to clear her."

"It's a fair proposition," said Macrae, evidently relieved. She's a bright lookin' lassie and I'd be glad to see her free of this coil. But I'll be keepin' an eye on the hoose forby." He looked at his watch. "This time to-morrow I'll call you up. And if there's anything I can do let me know."

"We won't be able to hold him after the twenty-four hours," said Gregory when he had gone. "He is acting against his instincts now. And if the papers keep on about the incompetence of the police, the chief is only too likely to give them something else to talk about by arresting the girl on the strength of her presence in the house at approximately the time of the murder. Now for heaven's sake let's get at those notes."

"If you'll tell me just exactly what you want to look for, I'll stand more chance of getting it," I said.

"We want anything that has to do in any way with the scent of heliotrope. We must scan every word. Sometimes people notice things and record their impressions without knowing it."

I nodded and for the next half hour we were both absorbed in our search. Then Gregory pushed back his papers with an impatient sigh. "Not a thing," he exclaimed. "Not a trace of anything except what we have already."

"Wait," I said. "I don't know, but I think there is something—just a little thing."

"Where?" snapped Gregory, pouncing on me like a dog on a bone.

"Well, don't get excited. It's not much and may be nothing. It's just a sentence in Mrs. Carlton Smith's evidence. Here it is:

"*She was just an ordinary deaf-looking person in a purple bonnet.*"

"Well, whatever—"

"Don't you see? *Purple* bonnet. Lots of people call heliotrope 'purple.' Supposing this person wore a heliotrope bonnet, wouldn't it—"

"It would, by Jove, it certainly would! You score, old man. It's a smart hit, even if it isn't a right one. It is quite conceivable that a woman who was fond of the scent of heliotrope might be fond of the colour, too. On the other hand, that the colour and the scent should come together even remotely into this strange case and remain entirely unconnected is unlikely, at the least. We must get Mrs. Smith at once and induce her to give us more detail. I'll call her up. You listen and make notes."

We were fortunate in finding Mrs. Smith at home and her voice came gaily over the wire.

"Now that Jennie's out of it, I'm not a bit interested in your old case," she said, when Gregory began to question.

"Jennie isn't out of it yet," he told her in a tone which quenched some of her gaiety. "And there are other innocent people who may be involved. It is a serious matter, Mrs. Smith."

"Oh, I beg your pardon. I'll do all I can to help, of course. I'm not really as frivolous as I sound."

Whereupon the following dialogue was duly transcribed upon my note book.

"You said that when you called upon Mrs. Simmons there was a visitor already there. We want to know all about her. Everything you can remember, impressions, thoughts, everything."

"I don't remember very much. She was deaf. Mrs. Simmons said she was deaf and she was the deafest looking person I ever saw. Sort of blank looking. Seemed to pay no attention to anything. Just sat there.

She looked like someone who hadn't an object in life or like someone whose object in life was so absorbing that nothing else mattered."

"A very good description. But what was her physical appearance?"

A little giggle came over the wire. "She didn't have any. I mean she was so indeterminate that I can't describe her. She was little and oldish young or youngish old, might have been thirty or forty-five. She had a small face and you couldn't notice anything about it except the eyes. They were light hazel and blank like dolls' eyes. I simply can't tell you what she wore. I don't know—except the bonnet. I noticed the bonnet because it was a bonnet. No one wears bonnets now. But this was a bonnet all right—a purple bonnet."

"What do you mean when you say 'purple'?"

"Why—purple, of course."

"But there are so many shades of purple—mauve, lilac, heliotrope, lavender, deep purple—"

"Oh, spare me! I see what you mean. Well, I think this purple was—let me think—rather a pretty shade—I should say as near heliotrope as anything."

Gregory and I exchanged a congratulatory look, but he gave no other sign of satisfaction.

"Did you notice anything else?"

The voice came more slowly now.

"She carried a bag, I think—yes, I remember seeing a small bag on her lap—a kind of reticule thing—the same shade as the bonnet. That is absolutely all."

"Did she speak at all?"

"Not at all. She sat like a graven image."

"Did Mrs. Simmons speak to her?"

"No."

"She did not mention her name to you?"

"No. All she said was: 'You can say what you wish before her. She is stone deaf.'"

"Just one more question. Did it strike you that Mrs. Simmons, or anyone else in the room, used perfume?"

Again the little giggle. "How funny! No, it didn't. But she might have used quarts and I would not have known it. I had a frightful cold."

Gregory thanked her and rang off. "Confound people with colds!" he grumbled. "But the bonnet and bag were heliotrope, and that's something. We'll have to find this deaf lady and find her quickly."

Furrows began to deepen upon my already corrugated brow. I am not good at long-distance shots. But Gregory's absorbed face showed that he was already at work upon a plan.

"Well," I said, leaning back with a sigh of relief, "here's where *you* shine."

(To be Continued.)



LIFE

BY ALBERT KINROSS

GEOFFREY had come; so they were complete—the three sons of the house of Vigo, the daughter, the son-in-law, and their stepmother, Lady Vigo, second wife to Sir Anthony Vigo, now dying in the room above. It was the first time the whole family had been together under that roof. All of them were there, even Geoffrey, who had been cast out, and Sir Anthony, who now lay dying. Geoffrey had seen nothing of them since he had gone away. Then Sir Anthony had not been dying, but very much alive. "Not in my house—not in my house!" he had cried; and Geoffrey had answered, "Not in your house, and not even in your name."

To-day they were all together once more. His sister Ella—she had been a little girl and always frightened fifteen years ago, slender, in short frocks, with trim brown legs in trim brown shoes and stockings. Sir Anthony had bought her an earl—the gentleman over there who began to say things and never finished them. Rather expensive, Geoffrey reflected, now that he had seen him. His brothers, Merrick and Timothy— they had been school-boys then, timid and given to seeking shelter behind himself. Both were in the firm, had taken the chances that he had refused. He was glad he had refused. Merrick, the elder, seemed smothered, the youth knocked out of him and nothing definite to fill its place, with his long black coat and gentle hesitating way. Timothy was unhappy. You had only to

look at Timothy to see that he was unhappy. His stepmother, Lady Vigo, Geoffrey had never met before. She, like the Earl and his father's baronetcy, must be a later acquisition—a young woman, handsome, well-bred. Geoffrey felt sorry for her. She moved there like a ghost lost among strangers, as though in her heart she were repeating: "What are all these Vigos to me or I to them?" Sir Anthony, dying in the room above, was the sole link that held this little group together.

The cloak of conventional sorrow that muffled all their voices seemed actually real; created, indeed, an atmosphere infectious and profound. Were they, then, really sorry, thought Geoffrey, looking into the half-strange faces, hearing these whispered words and the conventional answers and questions that passed between him and them? Were they really anything but pale reflections of Sir Anthony's will? They were his brothers and sisters, and not one of them had had the courage to seek him out before to-day. Sir Anthony had put a stopper on that, and they had obeyed. To-day they had sent for him. Sir Anthony had commanded that, and again they had obeyed. A glimmer of contempt came into his eyes, and then one of pity. Had all these people trembled before that powerful old man? He supposed they must have been well paid for it; or were they too weak and too helpless to revolt?

"Sir Anthony said you were to go straight up to him"; it was Lady Vigo who was addressing Geoffrey now,

quietly and like a woman who has a duty to perform; "that I was to bring you."

Geoffrey was ready.

He followed her up two thickly-carpeted flights of stairs into the great bedroom on the second floor.

There was straw all down the street outside, so it was quiet here.

"Leave us," said a voice from the bed; and Geoffrey caught his father's eye fixed on him, already fixed on him as though Sir Anthony had been watching, waiting, till he came.

"And you, too." The same voice—this time to the nurse in her neat uniform.

"But the doctor——" the nurse began.

"I'm my own doctor, woman. Out you go, after her ladyship I want my son."

Geoffrey and his father were alone.

The older man held out a hand. "Take it," he said. "You've done without it all these years. You've beaten me. I had three sons, but you're the only one that's beaten me."

Geoffrey took it, and the hand drew him to a chair.

"Sit down close beside me, so that I can see your face."

Geoffrey and his father were eye to eye at last.

"You've gray in your hair," said the older man, "and a jaw something like mine; you were a boy the last time, and had the eyes of a woman; now—am I changed, too?" he asked.

Geoffrey was silent.

"You don't speak," said Sir Anthony.

"Why did you send for me, sir?"

"Ah!" and Sir Anthony came back to this great room.

"How do you know I sent for you?" he asked.

"You sent for me."

"I'm not your son," came coldly from the younger man.

"I know; your name's Duke now—Geoffrey Duke. Your mother's name. Egad, she was a woman, Geoff.; not snow and ice like that cold slut down-

stairs! You took your mother's name."

"I had a right to that."

"You've a right to mine, and the title and the land—you're the eldest," and Sir Anthony waited.

So this was why they had sent for him.

"My name's Duke; we settled that a good many years ago."

"Pig-headed, eh?"

Geoffrey sat like bronze.

"Pig-headed, eh? The same as me," said Sir Anthony; "I'm a good hater, too. But now—now there's no need for hate. I shall be gone as soon as this is settled. I've hung on for this. I want the name to go on—you're the eldest."

"There's Merrick and Timothy."

"They're no good. They're frightened of me, like that cold thing downstairs. You were never frightened. That's why we fell out."

"My name's Duke, and Duke it stays," said Geoffrey, rising.

"Fix your price—and sit down."

Geoffrey sat down.

"I have no price," he said.

"Won't you do it for money?"

"Money's no good to me now—ten years ago — twelve years ago — not now."

"You're rich now?" asked Sir Anthony.

"Comfortable."

"Ten years ago — twelve years ago — you weren't comfortable?"

"Uncomfortable enough to have a price."

"Starving?"

The younger man nodded.

"I've starved, too," said Sir Anthony. "Where did you sleep?"

"In parks."

"I always had a bed—some sort of a bed. I beat you there."

Sir Anthony changed the subject.

"I faced it. What did you do?"

"Faced it."

"Took rotten pay, and grinned — and moved on?"

The younger man nodded.

"And then you saved a bit?"

"Nothing to speak of."

"Beat you again," chuckled Sir Anthony; "you wasted time?"

"Time was cheap, sir."

"Time's never cheap."

Geoffrey did not dispute the point.

"And then you had things to sell, and you sold 'em?" pursued Sir Anthony.

The younger man nodded again.

"I sold mine, too—and things that weren't mine."

"You wanted to sell me — and I wasn't yours."

"I sold your two brothers, landed the firm with them, and there they are."

"And when you've gone?"

"They'll stick to it; they've shares enough. They can't get kicked out—unless they sell."

"They'll sell," said Geoffrey.

Sir Anthony changed the subject.

"You found a market at last?"

The younger man nodded.

"You took their prices at first, and then made them take yours?"

Again Geoffrey nodded.

"They had to take 'em or go without?"

"That's it," said Geoffrey.

"Where did you learn it?" asked Sir Anthony. "Not at Harrow, not at Oxford."

"In the same place as yourself."

"In the world, eh, Geoff.? That was my school and my college. One has to learn that in the world."

Geoffrey waited.

"Your two brothers haven't learned it yet; and they're in business. They're in the firm, directors—though I do most of the directing. They sign my cheques for me, Geoff., and get in the way, and haven't the pluck to give a straight yes or no."

Still Geoffrey waited.

"Why don't you lend a hand?" cried Sir Anthony. "I'll make it worth your while. You're a man. I beat you in two places, eh, Geoff.? But you're a man, my own flesh and blood, for all your airs and coldness. I know a man when I see one. Why don't you lend a hand?"

"I've my own work," said Geoffrey.

"How much do you make at it? Is it much?"

"As much as I want to make."

"How much do you want?"

"That depends."

"Wife and kids, eh?"

"Exactly."

"A boy?" And Sir Anthony waited.

"Two."

"I thought as much."

"And?"

"One of 'em will take my name when he finds out. He'll only have to put out his hand. I've made provision for that. My name and the title and the places—when he finds out. Deep, ain't I?"

"He won't find out."

"Egad, but I'd make him — if I were strong again!"

Sir Anthony changed the subject.

"You're well known now?"

Geoffrey nodded.

"I've heard of you these five years, and seen your portrait in the papers—Geoffrey Duke — my son Geoffrey Vigo!"

"Did you tell anybody?"

The older man reflected. "No."

"I didn't either."

Sir Anthony changed the subject yet again.

"Look here, Geoff. I kicked you out because you wanted one thing and I another. I said, 'He'll come back as soon as his belly pinches'; and so I kicked you out . . . You said you'd be a painter. I said iron and steel and Vigo's Foundry for all who have my name. I had made the firm; it was the work of my life; it was waiting for you—fortune and reputation for the mere handling! You were a fool. You said you were going to be an artist." "Be an artist," said I; "but not here, not in my house"; and you went away. You've stayed away—I grant it. You've come back at my request—I grant it. You've succeeded; you've done what you set out to do; you've beaten me—I grant that. You're a man, Geoff., in spite of your trade—I grant that, too. I thought artists were

fools; I thought they were spongers and lap-dogs, hangers-on who shirked honest work and amused the women. Some made money—I knew that. But so do fiddlers and men who sing at the opera, and actors, and all that trash. The women—they amuse the women. ‘None of that for my sons!’ I said.

“You went away, and after ten years I heard of you. You had come to the front without any help from me—your own doing. There must be something in the fellow, I said. He’s come through the ruck; he seems to be making a name for himself. There must be something in the fellow, I said. I’ve seen some of your paintings. I didn’t look for ’em, but I’ve seen ’em,—portraits of men—good, straight, honest work. ‘He isn’t a lap-dog, after all,’ I said . . . I began to respect you, Geoff. You’d done something. Merrick and Timothy—they’d had all the chances that you and I never had, and what had they done? Shoved me out of the firm as I would have done had I been in their place? Fought me for halves, and then the lot? Sponged on me, Geoff. Sponged on the firm, taken my name, and spent my money! To-day I sent for you. I’ve been a long time over it, I admit. I wanted to shake hands and make it up, Geoff. I wanted you to use my name again! I’ve made up my will that way. If you take my name and keep my name, and no name but the one I gave to you, you get the land and the houses. I can’t keep you out of the title; but the land and the houses—I can keep you out of that. Without my name you don’t get an acre, and your children and your children’s children don’t get an acre; but with it you’re rich—rich enough to burn your paints and brushes and pay the whole Academy to do your work for you . . . I thought you might be a man, Geoff., because you’d succeeded in spite of me. That took some doing—I know it. And now I’ve seen you, you’re no fool; you’re not like a fiddler or a pug-faced tenor; you cut your hair and wear your clothes like a gentle-

man. I know one when I see one. I’m proud of you, Geoff. You’re a man, and, though you paint and daub—by Gad, you’re as good a man as I am, doing real work!”

“Better,” said Geoffrey. He had been silent up to now.

Sir Anthony looked at him through half-closed eyes.

“Better,” said Geoffrey; “I’ll tell you why I am better. Can you stand it?”

“Go ahead,” said Sir Anthony.

“Twice just now you said you’d beaten me. Once because I’d slept in parks and you had always found a bed—‘some sort of a bed’—those were your words?”

Sir Anthony nodded.

“The second time it was because you’d saved and because I hadn’t?”

“I did beat you there,” added Sir Anthony.

“Not quite. I beat you both times—if you can listen—if it won’t tire you?”

“Go ahead,” said Sir Anthony.

“Do you know why I slept in parks, while you had always found a bed—some sort of a bed? *You’d taken my bed—done me out of it.* Nobody ever did you out of yours. That wasn’t quite playing the game. It wasn’t fair. I had to begin life over again. You just went on from your Harrow and your Oxford. Nobody kicked you out; you weren’t forced to start again. I was—and I’ve come through. Nobody stole your bed, but you had stolen mine. You didn’t beat me there, but I beat you . . . The second time it was because you’d saved. You were giving me a thousand a year when you kicked me out, and I made debts on top of that, and you didn’t care much whether I made ’em. We could afford it, you said. ‘As long as you don’t marry a ballet-girl, I don’t care what you do, Geoff.,’ you used to say . . . Well, you didn’t start with a thousand a year and debts. So that was hardly fair either. But that’s not the point. I’ll tell you why I didn’t save. Whenever I had any money I put all my

eggs into one basket, painted a picture, and starved and worried till it was sold. Had you ever the pluck to do that? When I was sleeping in parks, my 'Bridge-builders' was hanging in the Academy. It was a month before they hung it, and another two months before they sold it. I'd put all my eggs into that basket; and the man who bought it had to find me first. I had three stale crusts—one dry and two wet—in my pocket the day I met him, and a hundred and fifty guineas when we parted. And again I put all my eggs into one basket, and again and yet again. And then a man paid me four hundred guineas for 'Sunday,' and then I was safe. Had you ever the pluck to do that? . . . Ten years ago, twelve years ago—if you had sent for me then! I had my weak moments when I'd have taken money, even from you. Do you think I enjoyed it? . . . You saved and gave yourself a dozen chances; but I came through without saving, and taking twenty times your risks! I think I beat you there again, didn't I?—even though you said I'd wasted time. Time was cheap, I answered; you said, 'Time's never cheap.' My time was cheap, and a time of suffering's never wasted—but that you'll hardly understand . . . I've beaten you all through, first and last and in the middle; I'm a better man than you are, 'doing real work.'"

Sir Anthony was listening.

"My work's been real enough to me and several other people. And now you ask me to change my name, to throw away the name I've made for one that isn't mine. Would you change yours to Duke now? Not for all the titles, all the houses, all the land in England! Would you change Vigo to Duke?"—and Geoffrey paused. "I won't change mine to Vigo," he said, rising.

"That's your last word?" now asked Sir Anthony.

"First and last."

"You're right, Geoff.," he said, "but I'm right, too; and when both

parties are right, there's only war or death can find the answer. It's so among nations. It'll be so between us. You've a pretty easy victory, me lying here. I've offered you everything, and you've refused everything. Give us your hand, Geoff. I've done all I could."

It was a long clasp that followed, almost as though Sir Anthony were holding fast to life and surely must collapse the moment Geoffrey left him.

There was a knock at the door.

Lady Vigo entered, and father and son now drew apart. The nurse was close behind her.

"The doctor is here—he's been waiting," said Lady Vigo.

"Send him in," replied Sir Anthony; "there's precious little he can do for me. Good-bye, Geoff.," he added. "Perhaps next time we'll stand a better chance. We've rather made a mess of this one."

Lady Vigo was about to follow Geoffrey from the room, but Sir Anthony kept her back. "Stay here, Caroline," he said. "I want you. I don't want to see any of the others, but you can stay."

Geoffrey went out, down the two thickly-carpeted flights of stairs, to the library, where he and his brothers and sister and brother-in-law had met before. They were still there, still subdued, hushed, expectant, and whispering, as he had left them.

The Earl had lit a cigarette. He had given up trying to talk, and had retired to a deep leather chair and his meditations. He was obviously very tired of it all. Geoffrey's entry he hailed with a sigh of relief.

"Made it up with the old man?" he asked, brightening.

Geoffrey's answer could have been taken either way.

"So you'll be second baronet?" pursued the other.

"No, Merrick can be that."

Merrick, slow, deprecatory, made a movement. "But why, Geoff.," he murmured; "and now you're here?"

"Nobody knows I'm here, or knows of the connection but yourselves. I won't put in any claim."

"But we—" Timothy began. "We couldn't take it."

"You take all you can get, my son," said Geoffrey, smiling. Timothy was still "the kid" with him.

"Won't we see you again?" asked Ella.

"Not unless you particularly want to," said Geoffrey.

"Of course we'll want to," said the Earl; and, as if the thought had escaped him, "Rum lot, you Vigos," he added at large.

Lady Vigo interrupted them. She was very pale.

"The doctor sent me away," she said. "We are to wait. He'll be down presently," and she sank into a chair. All her strength had gone from her.

There was silence now for a space, as though they all felt that impending calamity had moved nearer to them, had come down from the great bedroom on the second floor and found a way into their presence; was no longer remote, intangible, afar, but here, in this very room.

An air of gloom and mourning was already on them, and, in its shadow, none dared speak. The spell even embraced Geoffrey, seeking an opportunity to take his leave and go back whence he had been summoned. None came to him.

The doctor joined them.

"It's all over," he said slowly.

Ella was weeping; Lady Vigo was deathly white; and Geoffrey, looking round that rich, warm room, with its padded chairs and stately bookcases, was shaken by a swift and fulgent intuition. To Geoffrey standing there, the old man's death was a signal. Merrick would throw away his long, black coat and hesitations, and be some quiet kindly settler in the country, growing roses and bothering his head about "the people"—he had that form of mildness stamped all over him. And Timothy would stop in a library of his

own now. He had always been studious, even taking a pleasure in his lessons. He had the face of a scholar and a book-worm. Ella and her Earl would do as they pleased, and play at life with no remonstrances, no awkward quarters of an hour such as the one now irking them. How the Earl must have hated his new connections—even at a price! And from them Geoffrey turned to Lady Vigo. A change had come over her pale face. A new beauty touched her cheeks with a faint rose and put a strange light in her eyes, as though, instead of "What are all these Vigos to me or I to them?" she were repeating, "I am thirty-three—seven more years in which I can live and love and lose myself; seven more years of youth—oh, seven more years!"

And in himself, try as he might, the infection ran its course. His work, real enough—what was it compared with what he might do once the need of money were removed? The dull portraits he turned out that made their three hundred guineas; the half-explored subject-pictures or landscapes painted to meet a date, one eye on the varnishing day, the other on his theme—were these his limit? Had all his mastery been revealed? He had to live, to meet concession with concession. He had to work for a public, for prestige and the dealers, as much as for his art. He was tied to London, to his market, to the big house and studio that cost so much in rent, to the hundred extravagances of an incomplete status and position. . . . Geoffrey could not escape these thoughts, they were stronger than he was.

From the stricken field of death had come forth life and promise in abundance. Such death as this was life; was the key that opened life's choicest doors, the rod of magic that evoked it. The wizardry had passed into Geoffrey's veins as well.

"You are the heir?" The doctor was addressing him.

"I am," said Geoffrey.



A STUDY OF HORSES

From the Painting by Fred Haines,

Exhibited by

the Royal Canadian Academy

THE GREAT CANADIAN TELESCOPE

BY J. S. PLASKETT



ASTRONOMY, which is one of the most fascinating of the sciences, if followed either as a profession or a hobby, and whose study even in a very superficial way is most interesting and elevating, has not had hitherto the attention in Canada that it has received in the older countries. This is not to be wondered at in a new country, where much energy is necessarily and rightly devoted to the settlement and development of the country, but it is certain that as the demands on the energies of the citizens of Canada for material needs is satisfied, the interest in Astronomy, and its following, in an amateur way, especially among the educated class, will markedly increase.

The cause and study of Astronomy has been developed in most civilized countries along three principal lines: 1. By the devotion and enthusiasm of individual amateurs actuated by pure love of the science, and many notable advances especially in England have been achieved in this way. 2. By its study in the Universities and Colleges and in observatories more or less directly connected with them. 3. By its cultivation and encouragement by Governments in the national observatories, established and supported in all civilized lands.

Although there are not in Canada, as in England, many amateurs engaged in systematic and valuable observational work, the first of these phases is represented in Canada by an organization which has been invaluable in increasing the interest in

the science and which is now known as the Royal Astronomical Society of Canada. This Society was formed in Toronto about thirty years ago by a number of enthusiastic amateurs, has grown and developed, until it is now nation-wide, holding meetings at various centres throughout the country, but with headquarters and valuable astronomical library at Toronto. So far as the second phase is concerned, Astronomy has hardly yet been given much attention in the Universities and Colleges in Canada, except in so far as it has been required in the profession of surveying. It is, however, receiving more attention of late and a Department of Astronomy with Professor C. A. Chant as head has been established at the University of Toronto. Plans for an observatory in connection were in preparation but are not likely to be proceeded with while the war is in progress. It is to be hoped that, as soon as conditions again become normal, this observatory may be established, as no department of astronomy can be truly efficient without an observatory for the practical training of the students and for post graduate research work.

Although Canada is perhaps rather behind other countries in these first two particulars, she is well in advance in the support accorded astronomical research by the Government. It has been said that the degree of civilization of a country may be judged by its support of astronomy, and in this regard Canada takes high rank, for the telescope, in the new Dominion Astrophysical Observatory, near Victoria, B.C., is more than double the

size of the largest instrument in the national observatories of other countries.

That the cause of Astronomy in Canada, so far as its national observatories are concerned, is in such a gratifying position is due mainly to the quiet and yet persistent and successful efforts of one man, the late Dr. W. F. King, Chief Astronomer of Canada, and Director of the Dominion Astronomical Observatory at Ottawa. The integrity and ability of Dr. King and his representations as to the advantage of a national observatory so impressed Honourable Clifford Sifton when Minister of the Interior, that the splendid building and equipment on the Experimental Farm at Ottawa was the result.

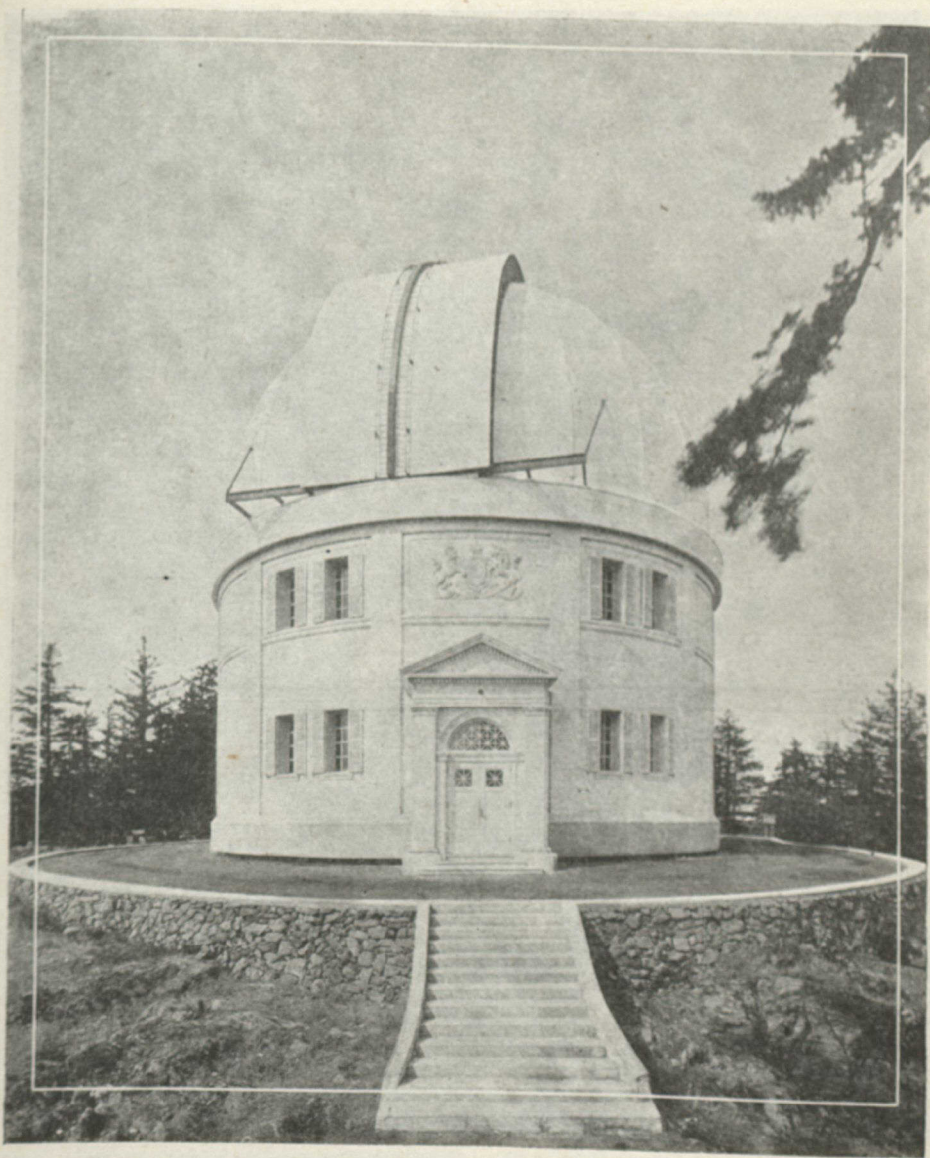
The writer was entrusted by Dr. King with the development of the work with the 15-inch refracting telescope at Ottawa. This telescope was chiefly used in measuring, by means of the spectroscope, the velocities of stars in the line of sight and the success attending this work was such, that, when the stars within range of the equipment became limited in number, it was felt that the desirability of obtaining a larger aperture could be strongly urged upon the Government.

Letters from eminent astronomers, memorials from various scientific societies, and the personal representations of several members of Parliament interested in Astronomy, were finally successful in inducing Honourable Dr. Roche, Minister of the Interior, who has been sympathetic to the project from the first, to sanction the making of inquiries and the calling for tenders, and in prevailing upon the Government to undertake the construction of a large telescope. Contracts for the construction of a 72-inch reflecting telescope were awarded in October, 1913, to the Warner and Swasey Company, of Cleveland, for the mechanical parts or mounting of the instrument and to the John A. Brashear Company, of Pittsburgh, for the optical parts.

The natural place for this telescope and the situation where the cost of installing would be the minimum, would have been at the Dominion Astronomical Observatory at Ottawa. The necessity, if effective work was to be done with such a large aperture, of having the telescope at the most suitable astronomical location, led to the investigation of several places in Canada, and the final choice of Victoria as the site. It is quite certain, with such a large aperture as this, which requires unusual steadiness of the air and even temperature, that more than twice the work, and that of better quality, can be accomplished with the telescope at Victoria than would have been possible at any other place tested.

The construction of such a large telescope, larger than any other in operation, and only exceeded in size by the Mount Wilson 100-inch reflector, not yet quite completed, is a big undertaking, but has nevertheless been accomplished in a comparatively short time. The contractors for the mounting, the Warner and Swasey Company, had built the mountings of the largest refracting telescopes in the world, the 40-inch Yerkes and the 36-inch Lick, and this experience was of great value in the design and construction of the mounting. About a year was occupied in the design, a year and a half in the construction and temporary erection at Cleveland of the mounting, and about six months in dismantling, packing, shipping and erection at Victoria. So that three years after the contract was awarded, the telescope was erected in its dome, ready, except for the optical parts, for operation.

Unfortunately, however, it was not possible to make as good time with the optical parts. The John A. Brashear Company were probably better situated than any other firm, so far as experience with large optical surfaces was concerned, for successfully carrying through so difficult a piece of work as the "figuring" (the name given to the polishing of an optical surface to



The Dominion Astrophysical Observatory at Victoria, British Columbia

the required accuracy) of the large mirror. The large disc of glass of which it was made was successfully cast at Charleroi in Belgium in the early summer of 1914 and was shipped from Antwerp only about a week before the declaration of war. Unfortunately a somewhat smaller disc, to be used in testing the principal mirror in the polishing and figuring

process and which was being cast at the same place, was not completed in time to get out of Belgium. The testing had to be performed by another method which, with other difficulties encountered, delayed the completion until April, 1918, about a year and a half later than the time of the completion of the mounting.

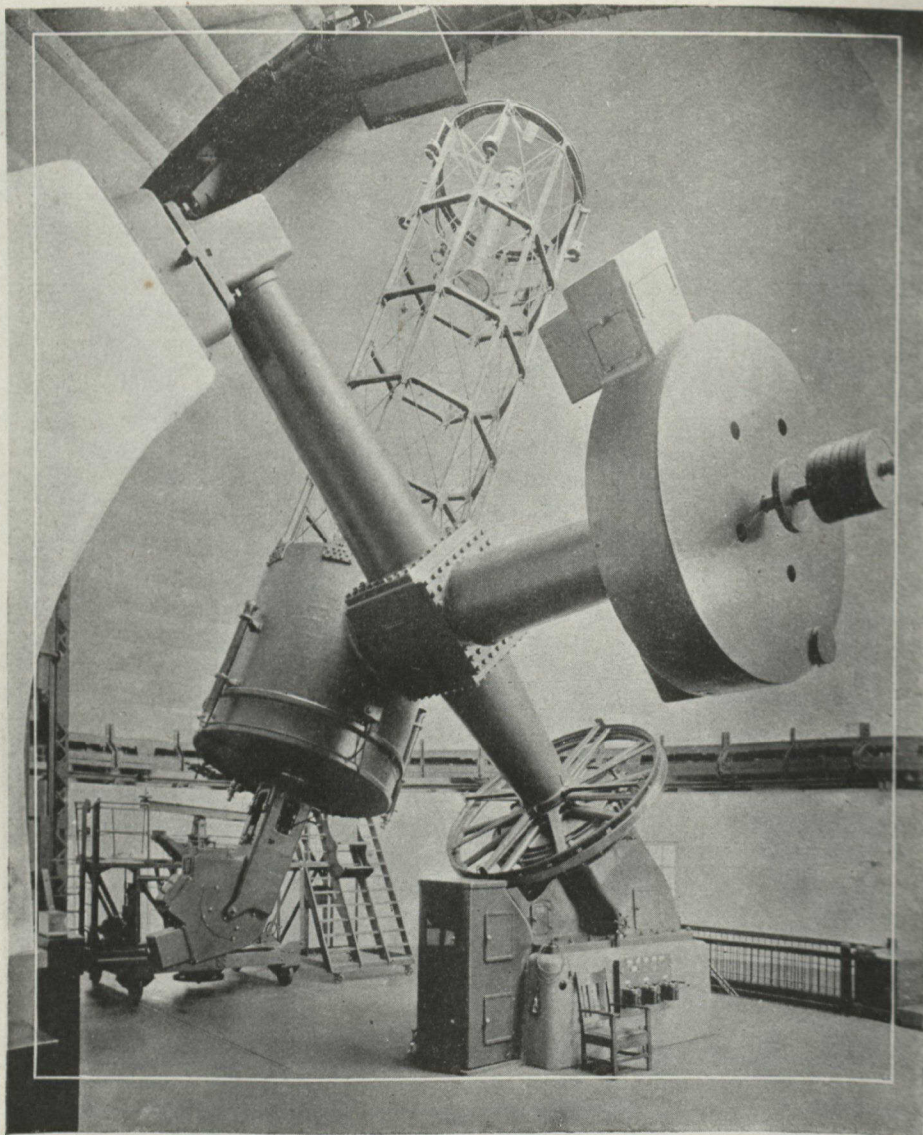


Fig. 1.—The Great Canadian Telescope, from the North-West

The disc of glass for the large mirror, which was received in Pittsburgh in August, 1914, was $73\frac{1}{2}$ inches in diameter, about $13\frac{1}{2}$ inches thick and weighed nearly 5,000 lbs. The first steps in turning this rough piece of glass into a mirror was to grind it all over, top, bottom, edge and central hole, to the required dimensions and then to polish the top and bottom.

This occupied about a year and the glass was reduced to seventy-three inches diameter, twelve inches thickness with a central hole about ten inches in diameter, about 600 lbs. of glass being ground off. The top or working surface of the mirror, which can be seen in figure 3, is concave and was polished approximately spherical, the diameter of the sphere which would



Fig. 2.—The Great Canadian Telescope, from the South-West

just fit this surface being 120 feet, making the glass nine-tenths of an inch thinner at the centre than the edge. The back was polished approximately flat and the glass was now ready for the "figuring," which is simply polishing in such a way as to bring the surface to the required accuracy, about one two-hundred-thousandth of an inch. In order to bring the light of a star accurately to

a focus, the surface was changed slightly from the spherical to a parabolic form similar to the reflector of a search light or automobile, and two years and a half were required in this process.

Probably not more than a thousandth of an inch was removed in all this time, but the tests on completion showed that the work had been performed with exceptional accuracy.

The deviation from the theoretically required form is probably not greater than the one four-hundred-thousandth of an inch, one four-hundredth of the thickness of the thinnest tissue paper. The minimum amount which can be measured mechanically is about one ten-thousandth of an inch, and the forty times greater accuracy was determined by an optical test, which space does not permit describing.

The concave surface has a bright coating of silver deposited from a chemical solution and the light from the star is hence directly reflected from this surface and does not enter the glass at all as in an ordinary mirror which is silvered on the back. Two other smaller mirrors, each $19\frac{1}{2}$ inches in diameter, $3\frac{1}{4}$ inches thick, one plane and one convex, which are used in conjunction with the big mirror in a manner to be presently described and which are also silvered on the front, were figured to similar accuracy, and these with the big mirror form the principal optical parts of the telescope.

Such optical parts, however, no matter how accurate, would be useless without some mechanical means of maintaining them rigidly and invariably in their correct relative positions, of pointing them accurately to any desired position in the sky, and of enabling them to closely follow the motions of the stars across the sky. Such a mechanism is called the mounting of the telescope, and the usefulness of the instrument is equally dependent on the accuracy of the optical surfaces, and the perfection in design and workmanship of the mounting.

The form of telescope with which the layman is most familiar is a refracting telescope, with a lens at the outer or upper end of the tube, and an eye-piece at the inner or lower end. This instrument, however, is a reflecting telescope in which the upper end of the tube, which is of skeleton construction, as seen in the photographs, is open, and the great concave mirror is at the lower end of the closed section, as can be seen from Fig. 3,

which shows the mirror in its supporting cell detached from the tube and supported on the silvering car, a mechanism for handling the mirror and cell when a fresh coating of silver is needed. When the light from a star or other object entering the open upper end of the tube falls on the concave silvered surface, it is reflected back to the centre of the upper end, where it forms an image of the object pointed at. This image can be viewed with an eye-piece or photographed on a plate placed at the focus, just as with an ordinary camera. Generally, however, the light will be intercepted before it reaches the focus by one of the smaller mirrors. If the plane mirror is used it is placed about four feet below the upper end of the tube inclined at an angle of forty-five degrees. The star light is hence turned through a right angle and the image is then formed at the side of the tube in a much more convenient position for observing or photographing. This particular form of the telescope is called the "Newtonion", from the great philosopher who first used a reflector in this way. If, on the other hand, the convex mirror is used, it is placed about seven feet down from the upper end of the tube, it and the method of support being well shown in Fig. 1. and hence again reflects the starlight back towards the large mirror. The beam passes through the central hole and the image is formed about a foot below the bottom of the tube, where it can again be viewed with an ocular or photographed.

This form of the telescope is the Cassegrain, also named after the one who devised it. The arrangement of the mirrors is such that although the focal length of the principal mirror and of the Newtonian form is thirty feet, about the length of the tube, the focal length of the Cassegrain combination is 108 feet, more than three and a half times as great. This combination acts similarly to a telephoto attachment to a camera which gives considerable magnification to the image without increasing the bellows

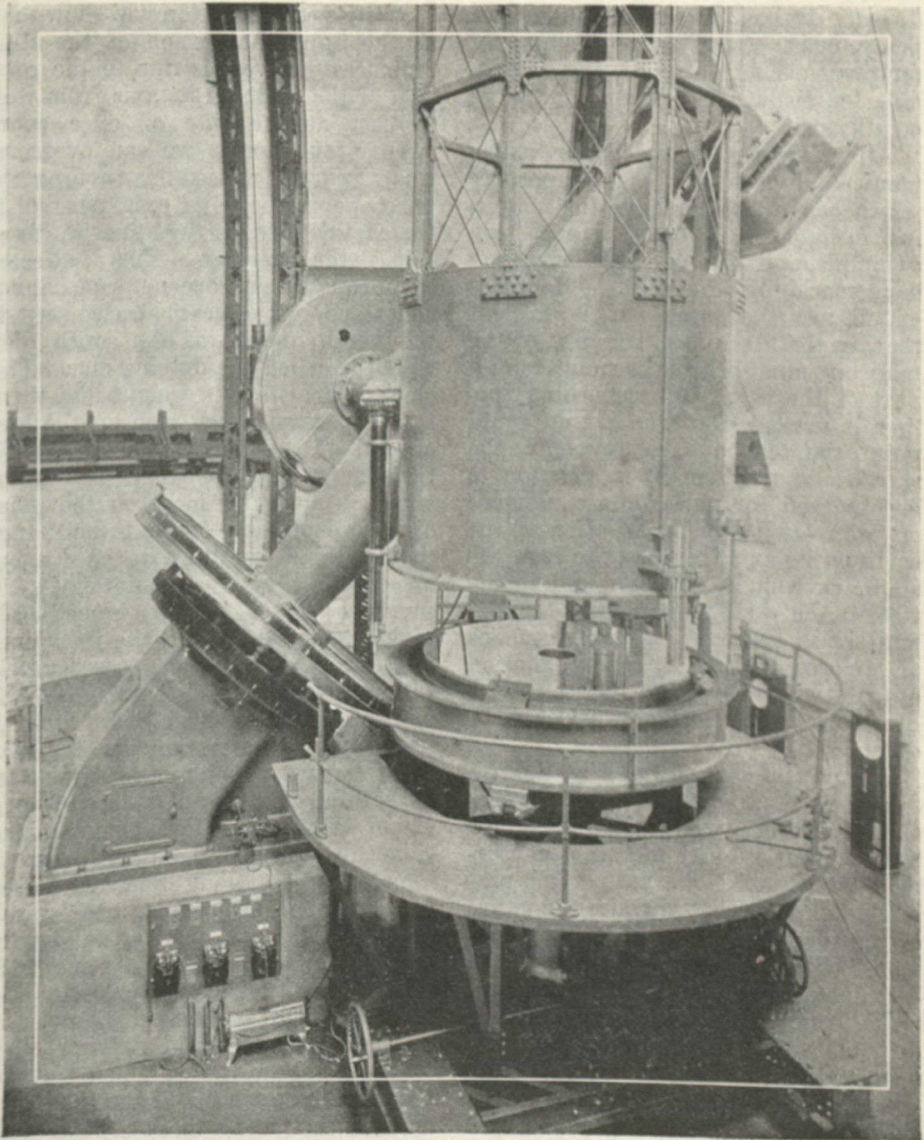


Fig 3.—Mirror and Cell of the Great Canadian Telescope ready to attach to the telescope tube

extension. The telescope will be mostly used in this form in conjunction with the spectroscope, the instrument seen in the photographs attached below the tube. The light of the star is focused on the slit of this spectroscope and the spectrum photographed on a small plate at the lower end.

The advantages of the reflecting

over the refracting type of telescope consist chiefly in its greater suitability for photographic work, of which about nine-tenths of modern astronomical work consists, in its much smaller cost, a reflector only costing about one-fourth a refractor of the same aperture, and in the fact that suitable discs of glass to make a refracting lens much greater than three feet in diameter cannot yet be pro-

duced. It has the disadvantages of being more sensitive to changes of temperature, and of not being so suitable for visual observations under all conditions.

All telescopes intended for astronomical observations of an aperture six inches or greater have the mounting designed according to a certain principle, and although the forms may vary markedly, the essential features of all are the same; It is evident that, in the first place, the tube of the telescope must be able to point to any part of the sky. But something further is needed, for even if you could point the telescope to any star, the star would not remain in position to be observed for more than a moment or two. Owing to the rotation of the earth on its axis from west to east, the stars, as well as the sun and moon, rise in the east, move across the sky and set in the west, and some means of following this apparent motion automatically by the telescope are necessary if any serious work is to be done.

A study of Fig. 1 and Fig. 2, with a careful reading of this description, should enable any layman to see how these conditions are met in this particular telescope. The supporting pier of the telescope is a massive structure of reinforced concrete with a base sixteen feet wide and nearly thirty-seven feet long, anchored to the rock and rising from the ground floor a distance of twenty-one feet to the observing floor. Only the north and south extremities of this pier rise above the observing floor and their shape and dimensions can be well obtained from the three illustrations. The shorter one to the south supports the lower end of the massive built-up shaft extending upwards to the left in Fig. 1 and supported at the upper end in an adjustable bearing on the north pier. This is the principal supporting shaft of the telescope and is called the "polar axis", because it points to the poles of the heavens, in other words, is adjusted so as to be exactly parallel to the axis of the earth.

A little consideration will show that, as the apparent motion of the stars from east to west is due to the rotation of the earth on its axis from west to east at the rate of once every twenty-four hours, we can overcome this apparent motion by turning the telescope on the polar axis, parallel to the earth's axis, in the opposite direction at the same rate. This is effected by means of a governor mechanism contained in the vertical case seen to the north or left of the south pier, which is called the driving clock. This clock is driven by a weight and turns a large worm wheel, seen on the lower end of the polar axis, at exactly the same rate as the earth. This worm wheel is normally loose on the polar axis, to enable the latter to be turned to any desired position in the sky, but as soon as the star is pointed at, the pressure of a button immediately rigidly connects it and the polar axis and drives the telescope to accurately follow the motion of the star. Workmanship of the very highest order is necessary in the mechanism, for with the Cassegrain combination it has to be pointed and moved with such precision that if the light from a star came through a pinhole at the end of a pole 108 feet long attached to the tube, it must be brought into a circle and the telescope must so follow the motion of the star that it remains in a circle not much greater than one-thousandth of an inch in diameter.

The polar axis and driving clock serve to follow the motion of a star from east to west, but if the tube were rigidly connected to the polar axis only one very narrow zone of the sky could be observed. Consequently it is necessary to give the tube a motion in a north and south direction as well, and this is effected by attaching it to the flanged end of a massive shaft sixteen inches in diameter and about fifteen feet long, which passes at right angles through the central cubical part of the polar axis and through the sleeve extending to the right in Fig. 1. This shaft is turned, and consequently the tube with it, by an electric mo-

tor through reduction mechanism gearing into a large spur gear, eight feet in diameter, keyed to the declination axis and contained in the large circular housing to the right. Hence by turning the tube on the declination axis in the direction, north-south, and the declination axis, tube and all on the polar axis in the direction, east-west, it is evident that the telescope can be pointed to any part of the sky, and as soon as pointed, can be immediately made to follow the motion of the star by clamping the worm wheel to the polar axis.

These motions are effected by electric motors operated from duplicate switchboards one on either side of the south pier. These motors turn the telescope north and south or east and west at the rate of forty-five degrees a minute on one revolution in eight minutes, and as, in changing from one star to another, you rarely have to turn the telescope more than forty-five degrees, this change can be effected in a very short time. The operating handle to the north on either board turns the telescope on the polar axis east or west, that in the middle turns it north or south on the declination axis, while the handle to the south rotates the dome.

In addition to these quick motions, which, normally, are operated by an assistant, who turns the telescope by aid of the graduated circles to the tabular position of the star, there are slow motions also electrically operated by push-buttons on a small aluminum board carried by the observer. There are two slow motion speeds, the fine setting motion which gives a speed of one revolution in thirty-six hours, and the guiding, one revolution in thirty days. After the telescope has been brought to the approximate position as read by the circles, the observer looks through one of the finder telescopes, of which two can be seen in Fig. 1, and brings the star into the centre of its field by the fine setting motion operated by buttons on the portable board. The star is then visible in the main telescope and any

small deviations of the image can be corrected by the guiding motions, one revolution in thirty days. Although this speed may seem very slow indeed, yet with the focal length of 108 feet less than a second is required to move the image across the spectroscopy slit, from one to two-thousandths of an inch wide.

Seven electric motors with a number of solenoids are required in the operation of the telescope, but the mechanism has been so beautifully designed and constructed that all these operations can be effected and the whole telescope handled practically as easily and quickly as one of a tenth the size.

Some details of the dimensions of the various parts may be of interest. Let us consider first of all the tube of the telescope. This consists of three sections—a central section seven feet six inches in diameter and six feet high, made of a single steel casting weighing seven tons—a lower section or mirror cell, also a steel casting of the same diameter, attached by bolted flanges to the central section and weighing, with mirror and the counterpoise system which supports the latter in the cell, about six tons—and finally the upper or skeleton section of the tube, octagonal in shape, seven feet six inches across, twenty-three feet four inches long, built up of structural steel and trussed so as to be exceptionally stiff for its weight of two tons. The total length of the tube is about thirty-one feet and it weighs fifteen tons.

A flange on the end of the declination axis is bolted to a boss on the central section of the tube, and this axis passes through the polar axis at right angles and serves to turn the tube north and south to different declinations or latitudes in the sky. The polar axis, composed of three steel castings bolted together as shown, is about twenty feet long, the central cube being three feet eight inches a side and the axis alone weighing nine and one-half tons. This and the other steel castings were made and machined at

the Bethlehem Steel Works and are beautiful pieces of workmanship. The total weight on the bearings of the polar axis is about forty-five tons, and yet so accurately is it balanced and so beautifully are the ball bearings, with balls three and one-eighth inches in diameter, made so that a weight of slightly over three pounds at the upper end of the tube is sufficient to overcome the friction of the forty-five tons on these bearings.

The telescope has been in operation now for some four months, sufficiently long to show that both the optical parts and the mounting or mechanical parts are unequalled in accuracy and convenience of operation. The tests of the mirror have shown that the surface is accurate to about the one-four-hundred-thousandth of an inch, and is such that the light from a star, illuminating the whole of this seventy-two-inch surface is concentrated into so small an area that the size of the image given on a photographic plate is only about one-five-hundredth of an inch in diameter. Some direct photographs of nebulae and clusters show beautiful detail and the star images are remarkably small and crisp, indicating the unequalled quality of the mirror. The John A. Brashear Company are to be congratulated on its perfection and on the successful completion of so difficult a task as the figuring of this great surface.

The Warner & Swasey Company, who have made the mountings for the two largest reflecting telescopes in the world, brought to the design and construction of this great reflecting telescope their varied experience in telescope mountings and the great engineering resources of the firm. The result is a marvel of engineering skill, which, in beauty of form, in perfection of mechanical detail, in accuracy and convenience of operation, and in the many improvements over existing telescopes, is unequalled in the world.

The revolving hemispherical dome which forms the roof of the circular steel observatory building, Fig. 4, was also designed and constructed by the

Warner & Swasey Company, and, like the telescope, is a great advance over existing structures for its purpose. The revolving dome for a reflecting telescope has to be designed in conjunction with the telescope, as several operating accessories are really attachments of the dome. This dome, which is sixty-six feet in external diameter, revolves on a circular rail resting on the wall of the observatory building, which is thirty-two feet high, the total height of the structure being about seventy-five feet. Both building and dome are entirely of steel construction and have double-sheet metal walls, separated by about a foot, allowing continuous circulation of air between the walls from openings at the ground up and out through louvres at the top of the dome. This is to prevent overheating during the day, while the steel construction allows the whole building, when the shutter is opened, to rapidly assume the air temperature, a necessary condition for success in observing.

Access is had to the sky by an opening in the dome, closed by a pair of shutters, having a clear width of fifteen feet and extending from the base of the dome to six feet beyond the zenith. These shutters are operated by electricity, and when open the dome can be revolved, also by electric motor, at the rate of once around in six minutes, until the shutter opening is pointed towards the place in the sky where observations are desired. The length of this opening can be limited to the width of the tube of the telescope by electrically-operated canvas curtains running up and down inside the shutter opening. These are for the purpose of preventing vibration of the tube if the wind is blowing.

In addition, and one of the most essential features of the dome, there is the observing platform, moved up and down the circular main ribs of the dome, within the shutter and wind curtains, by cables and electric motor. This is to enable the upper end of the tube to be reached by the observer

when direct photographs are being made at the principal or Newtonian focus. Such an appliance is absolutely essential as the plate-holder and guiding microscope by which the observer is enabled to keep the stars exactly centred are sometimes forty feet from the floor, and with the telescope constantly in motion, work could not be done to advantage unless the appliances for reaching and operating the mechanism were most conveniently arranged. This observing platform is admirably designed and constructed, can be reached in any position by a stairway, and is fully protected by railings, so there is no danger of falling to the steel observing floor thirty or forty feet below.

When using the Cassegrain form of the telescope the images are formed at the lower end of the tube, and the eyepiece for visual observation and the guiding ocular for keeping the star centred on the slit of the spectroscope can easily be reached by short observing ladders as they are never very far from the floor.

A regular programme of work for this telescope has been prepared in co-operation with the Mount Wilson Solar Observatory by which the three largest telescopes in the world, at Mount Wilson, the sixty-inch reflector and the 100-inch, when the latter is in operation, and at Victoria, the seventy-two inch, will work together in obtaining the radial velocities, in other words, the speeds towards or from us, of stars too faint to be observed with small telescopes. This important work, with allied investigations related thereto, is one of the most urgent needs in modern astronomical research, and when the radial velocities of all stars whose cross motions have also been measured, are determined, it will lead the way to great advances in our knowledge of the structure of the universe. These radial velocities are obtained by means of a spectroscope attached to the telescope. By measurements of the spectra photographed by this instrument we can determine not only the veloci-

ties of the stars, but much information in regard to the elements present in their atmospheres, their physical condition as regards pressure and temperature can also be obtained. Further, the most recent development of the use of the spectroscope, and this was worked out at Mount Wilson within the last year or two, is that for most stars a very good estimate of their distance can be obtained. When we consider that all this knowledge is obtained simply from the character of the light coming from the stars, and it matters not how far they may be away so long as they are bright enough or the telescope is large enough to obtain their spectra, it may be safely said that the spectroscope is one of the most wonderful engines of research ever devised.

However, spectroscopic work is not the only line to be followed at Victoria. An arrangement has been made with Professor E. C. Pickering, director of the Harvard College Observatory, to make direct photographs with this telescope of certain regions of the sky, called the Harvard Standard Regions. Each of these plates, which can be obtained by an hour's exposure, will require several days' labour for the measurement and reduction which Professor Pickering has agreed to have done, and the results will be used in extending the well-known Harvard work on the magnitudes or brightness of the stars to much fainter stars than have hitherto been obtained. This arrangement, in the present under-staffed condition of the observatory at Victoria, will enable the unequalled quality of the instrument and its proved effectiveness in obtaining images of stars several times fainter than is possible with the Harvard instruments to be advantageously combined with the experience and skill of the Harvard staff in measuring and reducing the plates and thus rendering available a magnitude scale of the faintest stars several years sooner than would otherwise have been possible.

As will be noted, nothing has been

said about any visual observations nor of any attempt at making discoveries of heavenly objects. Every astronomer knows that the prevalent idea in the lay mind about the work of an observatory is that the telescope is used in sweeping over the sky in a sort of random way to find new planets, comets or other objects. This is very far from the truth, for in the first place a very large telescope is most unsuited for this work, and in the second place, little or no useful work can be done by following such a plan. As a matter of fact, this telescope is used entirely photographically in work carefully and systematically planned, according to a definite programme along the lines that will be most useful to the science. No visual observations whatever are made nor likely to be, and the telescope is only used visually on Saturday evenings between eight and ten, when the public are given the privilege of observing interesting celestial objects with the great reflector.

There can be no question that Canada's enterprise in erecting this magnificent equipment for astronomical research has excited the admiration of

scientific men the world over, who will be awaiting with great interest the results to be obtained. The equipment was put into actual operation within a week after the optical parts arrived, something quite unprecedented in such an undertaking and an indication of the care with which all details had been worked out and all preparations made.

At present the observatory is much under-manned, as in place of a scientific staff of five or six required to operate the instrument to capacity and keep abreast of the observations in the measurement and reduction of the plates, only one astronomer besides the director is available. Nevertheless, a good start has been made, and although no such output can be expected as under normal conditions, every endeavour is being made to put the work of the telescope on such a sound basis that when sufficient help is available scientific results may be obtained that in quality and quantity and in their effect in advancing our knowledge of the universe may be worthy of the splendid equipment so enterprisingly and generously provided by the Government.

FULFILMENT

By PHYLLIS FLOWERS ATKEY

TO every ship, the harbour lights;
 To every stream, the sea;
 To every wind-blown bird that roams,
 His nest beneath the tree.

REMINISCENCES POLITICAL AND PERSONAL

BY SIR JOHN WILLISON

X.—A LETTER AND A MYSTERY

IT is not easy to discover the sources of the antipathy between Honourable Edward Blake and Sir Richard Cartwright. If we remember, however, that Cartwright was very loyal to Mackenzie, while Blake was an uncertain and uneasy colleague we shall probably be close to the roots of the quarrel. It was Cartwright's fortune to sustain many defeats and to wander far and often in search of a constituency. He was one of those candidates who could be elected only in the strongholds of his party. He could not draw support from among his opponents nor even attract independent voters to his standard. He was, however, always anxious to be in Parliament and possibly believed that if Blake had exercised in his behalf all the authority which a leader commands he would not have found it so difficult to secure a nomination and hold a constituency. Possibly he was more eager to be in Parliament than Blake was to have him there. At least it is certain that the two men had no love for each that the two men had no happy personal relation affected the cohesion of the Liberal party.

When Mr. Blake resigned the office of leader Sir Richard became the chief spokesman for the party in Ontario. In practice the dual leadership which prevailed in United Canada persisted. Holton was the leader for Quebec un-

der Mackenzie, Laurier under Blake, Langevin under Macdonald, and Monk under Borden. Gradually, however, under Thompson, Laurier and Borden the single leadership developed and after Monk disappeared from Parliament the old system ceased to have even nominal recognition. Mr. Blake was in Europe when commercial union with the United States, subsequently watered down to unrestricted reciprocity, was adopted as the fiscal platform of the Liberal party. In the adoption of this platform Mr. Blake was not consulted. This neglect he resented since he still had a seat in Parliament and had not expressed any intention to withdraw from public life. When he reappeared in Parliament after two years of rest and travel abroad it was discovered that he was restless and discontented. When Mr. Mulock introduced a resolution affirming, perhaps unnecessarily, the attachment of Canada to Great Britain, Mr. Blake left the Chamber as the bells rang for the division. "I will not vote for a sham," he said when asked why he had retreated. I had full knowledge of the incident and an interpretation of his attitude which need not be emphasized. It soon became apparent that he was not under discipline nor in consultation with the official leaders of the party. In the debate over the charges which necessitated Mr. J. C. Rykert's withdrawal from Parliament

he separated himself from his Liberal associates and submitted an amendment which they had to support, although a substantial modification of the Liberal position was involved. His ascendancy in the House was very manifest, but in degree as he was mutinous and disposed to independent action the position of Laurier became difficult.

There were still those who would have restored Blake to the office of leader, and there was a suspicion, perhaps unfounded, that he was willing to be recalled. Always sensitive to any suggestion that he desired recognition or preferment, Mr. Blake wrote to *The Globe* from Maisonrouge, Pointe au Pic, on June 30th, 1890, "My attention has been called to the fact that your recent article has given circulation among Liberals to Conservative allegations that I desire to resume the leadership of the Liberal party. I beg space to say that there is not a grain of truth in these allegations and that I am no more desirous to resume than I was to assume or to retain that post. My only wish is that the confidence and affection of Liberals of all shades may induce Mr. Laurier to hold the place which he so admirably fills." This letter is very like Blake in its complete repudiation of all interested motives and even in the delicate suggestion that his attention "was called" to the article which gave occasion for the statement. Probably at this time, and possibly at no time, had he any settled desire to replace Laurier. Had he any such notion he would have guarded even against self-discovery of the motive by which he was actuated. That was his way. He would not let his own soul express itself nor ever recognize the human impulses which were of the essence of his being. For as I have said elsewhere, Mr. Blake was essentially aspiring and ambitious and fundamentally unhappy in any subordinate relation.

If the country was slow to discover evidences of friction, the Opposition in Parliament was anxious and the

Conservative front benches deeply interested in the domestic situation on the other side of the Chamber. Nothing so comforts a Parliamentary party as signs of disturbance in the opposing forces. It is seldom that the signs are misinterpreted. One party rarely fails to penetrate the secrets of the other or to discover the personal relations among opponents. But if there was suspicion there was no immediate revelation of Mr. Blake's attitude towards unrestricted reciprocity. In the first weeks of 1891 rumours of a general election pervaded the country. There is reason now to believe that Sir John Macdonald had learned that the long and bitter quarrel between the Langevin and Chapleau factions in Quebec would probably produce grave disclosures in Parliament, and he feared that the Opposition would greatly increase its supply of ammunition if the House was not dissolved before the charges against Langevin and McGreevy of corrupt dealing with public contracts could be formulated. But he also had knowledge of the Farrer pamphlet suggesting political union with the United States, abrogation of the bonding privilege and a blockade of canal traffic at Sault Ste. Marie as coercive measures against Canada which only annexation could avert. Doubtless he was apprehensive also that the Liberal leaders had established dubious relations with American statesmen and that money would be provided from American sources to corrupt the constituencies. So far as I could ever discover, however, no American money reached the Liberal treasury, nor would the political leaders at Washington even agree to reciprocal free trade with Canada or to any definite alliance with the Canadian Liberal party. There is no doubt that Sir Richard Cartwright sought to effect such an alliance and that Mr. Farrer made pilgrimages to Washington, but there was no ground for the suspicion that any compact was entered into affecting the political status of Canada, nor was there any understand-

ing that commercial union should be regarded as a deliberate and conscious step towards political union. The truth was that the Liberal party had pledged itself to establish free trade with the United States, but had no assurance and could obtain no assurance that the United States would enter into any reciprocal commercial agreement with Canada even if the Canadian constituencies should return the Liberal leaders to office. But there was ground for suspicion and doubtless Sir John Macdonald was apprehensive that negotiations between the Liberal leaders and the statesmen at Washington would produce an understanding inimical to the future of Canada and sought by timely dissolution of Parliament to secure a political victory and destroy a movement which threatened the Canadian industrial fabric and the unity of the Empire.

Believing that a general election was imminent the Liberal leaders summoned a Provincial Convention of the party for February 17th and 18th, 1891, at Toronto. It is certain that Cartwright suggested the convention although the call was issued by Mr. Laurier. It is certain, too, that Mr. Blake was not consulted. This oversight, intentional or otherwise, produced momentous consequences, or at least revealed the actual relations between Blake and Cartwright. A few days after the convention was announced I received in the midnight mail a letter from Mr. Blake of ominous and startling import. As was his habit "personal" was written upon the envelope, but in that there was no comfort. I knew that it was intended for immediate publication, and I was dismayed at its contents. The letter, which was not lengthy, was a sweeping attack upon the Liberal trade policy as unwise, elusive and misleading, feeble in conception and impossible of execution, uncandid in evasion of the inevitable results, requiring assimilation of the tariffs of Canada and the United States, undistinguishable from commercial union, which should come

as the precursor of political union, and involving a constitutional issue for which the people were unprepared. In the letter there was no direct counsel to the country. It was destructive and denunciatory, hopeless in temper and outlook. Mr. Blake opposed unrestricted reciprocity in language that could not be misunderstood, not as disloyal or fundamentally inimical to Canadian nationality, but as less practicable than commercial union, which he seemed to favour as a preparation for political union. I do not suggest that the letter was a deliberate declaration for annexation to the United States, but that was the impression conveyed by a first reading, and it is certain that he gave no general support to the arguments which Conservatives were urging against the Liberal fiscal proposal. They were agreed as to the impracticability of establishing unrestricted reciprocity between Canada and the United States without a common tariff and discrimination against Great Britain, but there was nothing in this letter as there was nothing in the longer letter which Mr. Blake published on the morning after the general election to support the contention of Conservative newspapers and politicians that Mr. Blake rejected unrestricted reciprocity out of concern for British trade or British connection or because of any taint of disloyalty in the commercial policy of the Liberal party. At least he was not more loyal than his old Liberal associates nor was he averse to commercial union between the United States and Canada.

Although it was midnight when I received Mr. Blake's letter, one of the editorial writers was still at his desk, and I sought his counsel. When he had read the letter he advised, not with the discretion of a politician, but with the instinct and ardour of a journalist. "Publish it," he said, "we have the opportunity to produce one of the greatest sensations in the political history of Canada." I pointed out that if we did so the Liberal party would be overwhelmed in the election and

that I could not take the responsibility without consultation with Mr. Jaffray and the directors. He acquiesced, perhaps with reluctance, not because he was anxious to have the letter published, but because he was apprehensive, as I was, that it had been sent to *The Mail* and that by delay *The Globe* would lose the advantage of contemporary publication. On the way home in the morning I mailed a note to Mr. Blake acknowledging receipt of the letter and suggesting that as it was marked "personal" I assumed that it was not intended for publication. Possibly that note was neither as candid nor as veracious as could be desired. But those were days of "secret diplomacy", and an explanation with the flavour of plausibility had to be offered.

When I reached the office next day I found a letter from Mr. Blake intimating in a few frigid sentences that the letter was intended for publication and that in the general interest, in his judgment, "the sooner it was published the better". During the afternoon I laid Mr. Blake's letter before Mr. Jaffray, and he called a meeting of the directors. I feel even now the depth of gloom which pervaded that meeting. No one doubted that the letter would be fatal to Liberal prospects in the election, but the unanimous judgment was that Mr. Blake would insist upon publication and that the letter must appear. For the moment I submitted, but I was not convinced that *The Globe* should be the first to reveal Mr. Blake's position to the country, nor was I persuaded that publication was inevitable. That night I had dinner with Honourable David Mills, to whom I submitted the letter and with whom I collaborated in preparing an editorial to accompany its publication. Returning to the office I had the letter and the editorial put into type, but when I got the proofs into my hands I resolved to risk another day's delay and to make a personal appeal to Mr. Blake to maintain silence until Mr. Laurier could be consulted. I collected the type and

the galley proofs, locked them in a cabinet in my room, and sent the paper to press without the disturbing letter and the feeble, inconsequential editorial which Mr. Mills and I had produced.

When I called upon Mr. Blake next day I found that he had sent for Mr. Jaffray, that he was aware of the decision of the Board and my contumacy, and from Mr. Jaffray had assurance that there would be no further attempt to suppress his statement. Mr. Blake also told me that he had sent the letter to Mr. D. Burk Simpson, president of the West Durham Reform Association, and he suggested that if it did not appear in *The Globe* it would appear in *The Mail* as a despatch from Bowmanville. I tried to give reasons why he should see Mr. Laurier before publishing such a destructive statement in face of a general election, but he retorted angrily that Laurier and Cartwright had not thought it necessary to consult him before calling a convention of the Liberals of Ontario, and declared that if the convention were not abandoned he would appear before the delegates and expose the impracticable and impossible trade policy which they sought to impose upon the party. Mr. Jaffray induced Mr. S. H. Blake, K.C., to appeal to his brother for withdrawal of the letter, but he was as unsuccessful as was Sir Oliver Mowat, who also saw Mr. Blake and advised its suppression. When it seemed to be settled beyond all question that neither persuasion nor remonstrance could turn Mr. Blake from his purpose *The Globe* directors met again and again agreed, with the approval of Sir Oliver Mowat, that the letter must be published. I did not oppose the decision for I could not see that there was any alternative. In the meantime Mr. W. T. R. Preston, organizer of the Liberal party, had heard of the letter and entered a very vigorous protest against its publication. I gave Mr. Preston no promise, although as the hours passed I drifted steadily towards the definite con-

viction that the Board's instructions would be again disregarded. At one o'clock in the morning I called Mr. Jaffray out of bed and reported that the letter would not appear, and that I believed I had a compromise to suggest which Mr. Blake would not reject. Mr. Jaffray remonstrated mildly at the other end of the telephone, but I knew that he was more surprised than angry and that whatever the political consequences of my action the judgment of the Board would be tempered with mercy.

In a letter which I arranged to have delivered to Mr. Blake early next morning I explained that I was wholly responsible for the further delay in publication, suggested that I should go down to Quebec and place the facts before Mr. Laurier, and urged that he should not make any public statement until I could report the result of my interview and present any proposal which Laurier might submit to avert an open rupture, the disastrous consequences to the party and the embittered personal relations which must be the result of the course of action upon which he had determined. To this Mr. Blake finally agreed. I telegraphed to Mr. Laurier at Montreal an urgent appeal for an immediate interview. I did not feel that I could consult Mr. Laurier or Sir Richard Cartwright without Mr. Blake's consent, but even if I had thought otherwise both were out of the country. On January 29th Mr. Laurier was to speak at a dinner of the New York Board of Trade, which was dissolved by the sudden death of Mr. Windom, Secretary of the Treasury in the Harrison Cabinet, while on January 30th Sir Richard Cartwright spoke at Boston. As I had hoped, Mr. Laurier got my despatch at Montreal on the way home from New York. His answer was: "I will be in Toronto in the morning." I saw Mr. Laurier shortly after his interview with Mr. Blake, but much of what was said cannot be disclosed. Blake agreed to defer any public statement until after the general election on condition that the

Provincial Liberal Convention which had been called was not held. Cartwright bitterly resented the condition which Blake imposed, but the alternative was submission or disruption. I have always believed that Blake never fully understood, or at least would not admit even to himself, how vitally his dislike of Cartwright affected his action at this time, as I have always thought he cherished the expectation that Laurier would be set aside for himself as Hartington was set aside for Gladstone at a momentous hour in the history of the British Liberal party. I have wondered, too, if Sir Oliver Mowat was very anxious to suppress Mr. Blake's letter. He disliked unrestricted reciprocity and was inflexibly opposed to commercial union. But he was acute enough to see that Blake's letter would compel the Liberal party to reconsider the whole fiscal issue and he had no apprehension of any serious or definite movement towards political union with the United States. There was an eruption of annexation sentiment more formidable than he foresaw, but the masses of the party were not affected nor did any of the leaders give actual support to the agitation.

During the negotiations with Mr. Blake for the suppression of his letter, Mr. Farrer was in Washington. There is no doubt that he was trying to induce Mr. James G. Blaine, Secretary of State, to give public assurances that unrestricted reciprocity would be established if the Liberal party succeeded in the election. He was greatly embarrassed by the announcement from Ottawa when Parliament was dissolved that the United States Government had agreed to consider a renewal of the Reciprocity Treaty of 1854, with the modifications required by the altered circumstances of both countries. Sir John Thompson declared that the answer of Mr. Blaine "on behalf of his Government" to the representations of the Government of Canada "was an overture to Reciprocity". Mr. Farrer did not obtain from Blaine such a statement as

he desired, but he did persuade the American Secretary of State to address a letter to Congressman Baker, of Rochester, in which he said: "There are no negotiations whatever on foot for a Reciprocity Treaty with Canada, and you may be assured no such scheme for reciprocity with the Dominion confined to natural products will be entertained by this Government". Of Mr. Farrer's activity at Washington Mr. Blake had no knowledge, nor had Mr. Laurier any direct responsibility for his movements. Sir Richard Cartwright had full knowledge and, as I have said, had himself gone to Washington in the endeavour to effect an understanding with the United States Government, but beyond the letter to Mr. Baker, which was not indefensible under the circumstances, neither Mr. Blaine nor any of his colleagues entered into any compromising alliance with the Liberal leaders of Canada. There can be no doubt that Mr. Blaine was favourable to political union between the two countries and that he had confidential relations with Mr. Farrer, but he did not engage in any intrigue against the Macdonald Government or give moral or material support to the Opposition in the general election in which free trade with the United States was the supreme issue between the Canadian parties. On the other hand, the McKinley tariff and other measures of legislation and administration at Washington during this period were designed to affect the political destiny of Canada.

In Sir Richard Cartwright's volume of Reminiscences there is this reference to Mr. Blake's letter: "The election at the last was rather hurried, and the writs were issued at a moment when both Sir Wilfrid Laurier and myself were absent from Ontario. The instant it was known that they were about to issue, Mr. Blake prepared to publish a letter condemning our policy and had it actually in type in a paper in his old riding. This was discovered by a staunch friend of ours who had influence enough with the

publisher to defer the publication of the letter till he had time to communicate with certain of our supporters in Toronto, who brought such pressure to bear upon Mr. Blake that he finally, though with a very bad grace, suspended its publication till after the election. My own opinion of his conduct was such that I never spoke to him nor held any communication with him from that day, and I prefer to state the facts without further comment. The results are another matter."

In references to Mr. Blake or Sir John Macdonald it was difficult for Sir Richard to be just and impossible for him to be generous. There is no reason to think that Blake took deliberate advantage of the absence of Laurier and Cartwright from the country. He could not have thought that *The Globe* would refuse to publish his letter or that Mr. Burk Simpson would block its publication at Bowmanville. Moreover, there was *The Mail* in the full flower of independence, and other journals which would have been eager to give him a hearing. But from the first Mr. Simpson seems to have resolved that the letter should not go to the public. It is understood that it was not in type at Bowmanville, nor ever left Mr. Simpson's possession. He had a more difficult task than mine, but he was skilful enough and resolute enough to control a convention of Mr. Blake's own constituents. There was read to the convention a letter from Blake expressing gratitude for long and faithful support which deeply affected the delegates, but they had no knowledge of the reasons for his refusal to be re-nominated nor any suspicion that Mr. Simpson had persuaded Mr. Blake not to appear at the convention chiefly by insisting upon a rigid observance of the compact with Laurier that he would not speak until after the election. In *The Globe* office the printers, proofreaders and reporters necessarily had knowledge of the letter, and although there were many Conservatives among them, the fact that *The*

Globe had received such a communication or that it was put into type was not revealed. This I have always regarded as a striking illustration of the high code of honour which prevails among printers and journalists. Nor did I exact any pledge of silence or suggest directly or indirectly that there was any obligation upon printers, reporters or editors to respect the secrets of the office in which they were employed.

The letter which Mr. Blake published on the morning after the election appeared simultaneously in many Canadian journals and in *The London Times*. The Ottawa correspondent of *The Times* was Mr. Fred. Cook, who was also correspondent of *The Toronto Empire*, then the chief organ of the Conservative party. Mr. Cook was also Reuter's agent at Ottawa. Rumour was busy with the letter which Mr. Blake was understood to have written in explanation of his attitude towards unrestricted reciprocity and his reasons for not seeking re-election in West Durham. Naturally Mr. Cook was anxious to obtain a copy. He suggested to Reuter by cable that he should be instructed to see Mr. Blake and explain how deeply Great Britain was interested in his attitude and how much Reuter would appreciate a copy of his statement. Armed with this message, Mr. Cook came to Toronto and saw Mr. Blake at his home. Mr. Blake expressed surprise that the Reuter Agency should be interested, but explained that while he was honoured by the request, his first duty was to his own country and that the letter must be published in Canada as early as in the Old Country. He would not promise that Reuter should have first publication, but assured Mr. Cook that he should have a copy of the statement as soon as any other newspaper or agency. A few days later Cook had a letter from Blake dated at Toronto, February 22nd, 1891. "Referring," he said, "to the request made through you by Reuter for a copy of my paper, which, as I informed you, is not to be made

public till after the election, I have looked at it in view of what you told me and I see that even eliminating the personal paragraphs, it is much longer than ordinary cable limits would allow. I intend to-morrow to mail a copy to a friend in London, England, and if you desire, I will request my friend to let Reuter have it for the press as soon as it reaches London, not earlier than 5th March. Should you not so desire, my friend will place it in other hands. If you wish me to give this direction wire me to-morrow giving me Reuter's London address. I write this in fulfilment of the spirit of my promise that your people should have the paper as early as any on the other side of the Atlantic. But I need hardly repeat to you that I have no personal wishes on the subject."

Mr. Cook was apprehensive of delay on the ocean and suggested that Mr. Blake should let him have a copy of the letter in confidence on the day preceding that set for publication. On February 25th Mr. Blake wrote that he would mail a copy to Mr. Cook "by the morning mail of March 5th if you wish, so that you can have it in Ottawa that evening in case of any mishap in London. This, however, I can do only on your undertaking to keep the document absolutely secret on this side of the water." The letter reached London a day or two before polling in Canada. Early on the morning of election-day Mr. Cook received a cable message from Reuter's Agency that the letter was in its possession and expressing gratitude for his foresight and vigilance. An hour or so later Mr. E. F. Jarvis, at that time Mr. Blake's parliamentary private secretary and now Assistant Deputy Minister of Militia and Defence, called at Mr. Cook's house, as instructed by Mr. Blake, with a copy of the letter in a sealed envelope. Cook showed Jarvis the message from Reuter and suggested that as he did not require the copy it was probably better that it should not be left in his hands. He refused the envelope because he was anxious not to leave himself open to

suspicion of bad faith if there should be premature publication. *The Times* gave the letter in full, and a summary furnished by Reuter appeared in many other newspapers in Great Britain. For securing this letter in advance of other news agencies and for an early copy of Sir John Macdonald's last appeal to the Canadian people, the Reuter Agency gave Mr. Cook \$500. One of the grievances among Liberals was that Mr. Blake had transmitted his letter to London through the correspondent of the chief Conservative organ. This was not done, but even if Mr. Cook had been chosen as the direct medium of communication with Reuter it is certain that he would have scrupulously observed the confidence reposed in his honour and discretion, notwithstanding his intimate relations with Sir John Macdonald and the Conservative leaders.

The letter which Mr. Blake published on March 6th, 1891, was not the letter he sent to *The Globe* and Mr. Burk Simpson. The original communication, much shorter, but similar in argument and conclusion, has never been published. The manifesto of March 6th argued that Great Britain would never reimpose protectionist duties in favour of colonial producers while unrestricted free trade with the United States secured for a long term of years would, even though accompanied by higher duties against the rest of the world than he for one admired, give Canada in practice the great blessing of a measure of free trade much larger than we enjoyed or could otherwise attain. "Direct taxation, even in its most promising form, a succession tax, was out of the question, and therefore of the financial problem presented by unrestricted reciprocity he had seen no solution which would leave us without a great deficit." Any feasible plan of unrestricted reciprocity involved differential duties and the substantial assimilation in their leading features of the tariffs of the two countries. The absence of agreement would give to each country power to

disturb at will the industrial system of the other and unrestricted reciprocity, without an agreed assimilation of duties, was an unsubstantial dream. Unrestricted reciprocity, therefore, in its redeeming features was difficult to distinguish from commercial union. Hence "Commercial union, establishing a common tariff, abolishing international custom houses and dividing the total duties between the two countries in agreed proportions, would be the more available, perhaps the only available plan". The tendency in Canada of unrestricted free trade with the United States and high duties against the United Kingdom would be toward political union, and the more successful the plan the stronger the tendency, both by reason of the community of interests, the intermingling of population, the more intimate business and social connections and the trade and fiscal relations amounting to dependency which it would create with the States, and of the greater isolation and divergency from Britain which it would produce, and also and especially through inconveniences experienced in the maintenance and apprehensions entertained as to the termination of the treaty. Therefore, Mr. Blake contended, "Whatever you or I may think on that head, whether we like or dislike, believe or disbelieve in political union, must we not agree that the subject is one of great moment, towards the practical settlement of which we should take no serious step without reflection or in ignorance of what we are doing. Assuming that absolute free trade, best described as commercial union, may and ought to come, I believe that it can and should come only as an incident, or at any rate as a well understood precursor of political union, for which indeed we should be able to make better terms before than after the surrender of our commercial independence. Then so believing—believing that the decision of the trade question involves that of the constitutional issue for which you are unprepared and with which you do not even conceive

yourselves to be dealing—how can I properly recommend you now to decide on commercial union.”

The Globe interpreted Mr. Blake's manifesto as a declaration in favour of political union between the United States and Canada. It pointed out that during the election campaign the Conservative press had continuously asserted that he had withdrawn from public life because he felt that unrestricted trade with the United States was a disloyal policy, while his letter showed that he was for absolute free trade on the distinct understanding that it should terminate in political union without which it could not be carried out or even so much as be obtained. “Mr. Blake,” *The Globe* said, “alone is responsible for these opinions and for the far-reaching conclusion to which they lead. The Tory press which alleged that he was not willing to go as far as his party made a crucial mistake—his party is not willing to go as far as he. It is confident with all respect for him that unrestricted trade can be got without any sacrifice of political autonomy and worked without any very serious inconvenience to the revenue. It refuses pointblank to move in the direction of political union and is convinced, moreover, that it would not be necessary to do so in order to secure the boon which it has set out to obtain. Such is the view of all those Liberals whom *The Globe*, in the present hurly-burly, has been able to consult. Speaking for itself, this journal feels bound to say with all the emphasis at its command that Mr. Blake's main proposition, if we may so term it, is wholly distasteful. The country is in a bad plight, but a rough hand was laid on the Government's shoulder yesterday, and there is still a chance for recovery, provided the people assert themselves before it is too late. We prefer to take that chance rather than to share with Mr. Blake the responsibility of advocating political union which, as he knows, would be for Canada a revolution of tremendous magnitude, and for Bri-

tain perhaps the beginning of the end of her glorious Empire. At the same time we would not be Liberals if we challenged his right or that of any other Canadian to discuss the subject of our national future from the continental standpoint. What effect the pronouncement of so distinguished a man may have upon current politics remains to be seen. The present régime is fast breaking up and the confusion visible on all hands will be increased by this weighty deliverance. It will be the duty of the Liberal leaders, we should imagine, to define their position without delay, for, coming on the heels of yesterday's elections, Mr. Blake's utterance cannot fail to produce a feeling of profound anxiety throughout the Dominion. *The Globe* has championed British connection for fifty years and means to continue on that line until loyalty to Britain becomes treason to Canada. Things have not reached that fateful pass yet and we pray they never may.”

Naturally there was a fierce outcry in the Conservative newspapers over *The Globe's* interpretation of Mr. Blake's letter. Many Liberal journals read the letter only as an exposure of the impracticability of unrestricted reciprocity and a frank intimation to the country that political union was the inevitable, ultimate outcome of the policy to which the Liberal party under Laurier and Cartwright was committed. Many messages came to Mr. Blake in urgent appeal for a more definite statement of his position and an unequivocal repudiation of *The Globe's* conclusion. For four or five days he was silent, but on March 11th he wrote from Ottawa: “The contradictory inferences to which a sentence in my Durham letter, detached from its context, has in several quarters unexpectedly given rise, conquers my reluctance to trespass again so soon upon your columns, and I crave space to say that I think political union with the United States, though becoming our probable, is by no means our ideal, or as yet our inevitable future.” But no word of re-

proof ever came to *The Globe*, nor in many intimate conversations that I had with Mr. Blake before he left Canada for London to take the seat for Longford in the Imperial Parliament did he ever refer to the subject. When the National Liberal Convention of 1893, responsive to powerful influences within the party, so recast its fiscal policy as to escape the implication of intention to discriminate against Great Britain, Mr. Blake in a public statement expressed satisfaction and declared that the revised platform was in consonance with the

views which he had entertained and expressed. So I leave the mystery of the West Durham manifesto to the future, which may or may not afford a final and complete revelation. In the bye-elections of 1892 Blake's letter was the chief reliance of the Conservative Government and was infinitely damaging to the candidates of the Liberal party. Thereafter the door was closed forever to any prospect of reunion or co-operation between Blake and the leaders of the Canadian party which he had done so much to create and so much to divide and destroy.

Sir John Willison, in his next chapter, will discuss the ever-present problem, "Race and Religion in Canada".

ON A BALKAN SUNSET

(TO MY WIFE)

By O. D. A. STEVENSON

A LONG the line of mountain walls
 The western sky with colour glows,
 While all around the twilight falls
 In loveliest tints of gold and rose.

But, though the sun no more is here,
 His light still lives; for, bright and high,
 The silver moon swings calm and clear,
 Soft shining in the eastern sky.

A lesson sweet for lonely hearts—
 The sun's light in the bright moon lies!
 So, distance lovers only parts—
 Love, like the sunlight, never dies!

BOLSHEVISM

BY W. A. WILLISON



R. SAMUEL GOMPERS, President of the American Federation of Labour, made the statement, on the eve of his departure to Paris to attend the International Labour Conference, that American organized labour will fight the spread of Bolshevism with every energy at its command. "Bolshevism," he declared, "is as great an attempt to disrupt the trade unions as it is to overturn the Government of the United States."

Again, at the annual meeting of the American Federation of Labour at St. Paul, Mr. Gompers said:

"I am not going to give up voluntarily the labour movement with its achievements of to-day, to look for the chimerical to-morrow. I think the greatest, the most radical, the most idealistic, and the most fantastical declaration which any body of men has made has been by the Bolsheviki of Russia. And they have lost, not only the meat from the bone, but the bone itself, and have not even the shadow. We here prefer to go on in this normal way of trying to make the conditions of life better to-day than they were yesterday."

In pursuance of such normal methods lies the salvation of democracy. There is no virtue in Bolshevism save the virtue that good may bring out of evil. It is not the purpose here to review the progress and causes of the Russian Revolution, but to reveal the truth, so far as it may be gathered, of Bolshevist rule. The old régime in Russia fell owing to its incapacity to deal with the complex political prob-

lems raised by modern war. The further course of the revolution was determined by the rapid disintegration of the Russian army and by the early assumption of power by extreme social elements. From the first there was intense rivalry between the Duma Committee and the Council, or Soviet, of Workmen's and Soldiers' Deputies. The first Provisional Government was a compromise between the Liberal and Constitutional Duma Committee and the Revolutionary Socialist Soviet. Kerensky, who was Vice-President of the Soviet, became the representative of the socialistic groups in the first Provisional Government. From then until now the history of the revolution has been a struggle between factions, in which extreme has given place to extreme, until to-day Lenin and Trotsky, under Bolshevism, control the country and menace the world with extravagant doctrines. It was on November 7 that the Bolsheviki captured the Soviet Congress, attacked the Provisional Government in the Winter Palace, and seized the supreme power.

A close student of Russian affairs, in the September *Round Table*, says:

"The Bolsheviki, led by the cold and stubborn fanatic Lenin and the clever adventurer Trotsky, solved the problem of power in a reckless and simplified manner of their own. They cared little enough for Russia; their aim was to bring about a world revolution. They attracted the soldiers by the promise of immediate peace, the peasants by the promise of the immediate socialization of land, and the workmen by the promise of the immediate establishment of labour control in the factories. They forthwith created an armed force and

ruthlessly applied coercion to their opponents. The Bolshevik idea of the triumph of the masses over their exploiters, over the bourgeoisie, spread like an epidemic through the land, and for a time rendered futile every attempt at resistance. The Bolsheviks seized the opportunity, before the army had dispersed, to create a Praetorian guard of their own, and then, masters of the situation, proceeded to carry out their social experiments.

"The Bolsheviks carried out their promises. They did make a peace that placed the richest parts of Russia under the control of German Imperialists and created in the rest of Russia a state of perpetual civil war. But, at any rate, the army broke up finally and the soldiers drifted back to their homes. The Bolsheviks did proclaim the confiscation of private estates and of monastic and crown lands, but no system was devised for the partition of land among the peasantry. The result was an orgy of plunder and destruction in which the worst instincts of the peasantry found vent, but which brought them not the slightest economic relief. Indiscriminate land grabbing simply led to a strikingly unequal distribution of the land of private estates among the peasantry, and thence to further conflict between villages and individual peasants. The workmen were given control over the factories, or the factories were nationalized. But the workmen proved incapable of managing the factories they controlled or of inducing themselves or their comrades to work with any energy. And in spite of the enormous sums spent by the Bolshevik Government on subsidies for the payment of wages to workmen who toyed with their work, the factories closed down, one after another, and the workmen drifted into the streets. The store of manufactured goods swiftly declined, paper money became valueless, and there was practically nothing to give the peasants in exchange for their produce. Add to this the fact that communications were cut by civil war or German occupation, that transport, which had been overstrained by the war, had now sunk into a deplorable condition, and that the suggestion of anything like a normal circulation of goods sounded like bitter irony, and it becomes intelligible that the masses in a few months began to realize that the Bolshevik peace was considerably worse than war. The food shortage became appalling, and punitive expeditions were sent into the country to extort corn from the peasants.

"That is the material side. The system of rule is, in theory, a dictatorship of the proletariat exercised through central and local Soviets of workmen, soldiers and peasants. The propertied classes are disfranchised, also the educated class in so far as its members do not accept the Bolshevik creed. But workmen, too, and peasants

who elect non-Bolsheviks find themselves forcibly disfranchised. And, in fact, Bolshevik rule is a clumsy autocracy exercised by Lenin and Trotsky through the Red Guard or Red Army they formed during the period of the dissolution of the regular army. The Red Army, which is incapable of resistance to an organized and disciplined force, terrorizes the population, and serves as the instrument of a tyranny more immediately cruel, more openly unscrupulous, than any that the Ministers of the old régime could have conceived or exercised. That the Press is completely gagged, that liberty of action is a matter of purchase or evasion, that corruption runs riot, that justice is a legend, that human life has become almost as valueless as the rouble in an epidemic of murder and massacre—these are the cold facts of the Bolshevik rule."

What the Bolsheviks demand is a revolution in the established order of modern society which would deny authority and the means of livelihood to any but those professing their principles. They would have Labour own the tools of production and control the workshops. They would divide all land among the peasants and agricultural labourers. Their creed means the overthrow of the manufacturer and the merchant. It menaces the welfare of every man who, by individual initiative and ability, has created his own business or established his little shop. It denies recognition to everything but mediocrity. It acknowledges only manual workers. There is no place in its citizenship for men who have made sufficient out of their own efforts to retire in their old age upon their little savings. Those who direct industrial affairs, the professional men and women who conduct great departments of public life, are aristocrats or bourgeoisie who are permitted to live only at the discretion of a tyrannical and ignorant party exercising an autocratic power as despotic and brutal as anything in history. Something of the true condition of Bolshevism is revealed in the Note of the Neutral States to the People's Commissary for Foreign Affairs at Moscow which was presented by the Swiss Ambassador and President of the Diplomatic Corps in Russia at

Petrograd, on September 5, 1918. The note reads:

"Inasmuch as the representatives of the diplomatic corps at Petrograd were able to ascertain, definitely, the mass arrests of persons regardless of age and sex, as well as the summary convictions imposed by soldiers of the Red Army day after day, they requested a conference with Commissary Zinovieff and were received by him on Monday, September 3. They declared that it was not their purpose to interfere in any way with the struggle between political parties now raging in Russia; they desired only from the standpoint of humanity and in the name of the Governments which they represent, to express their most profound indignation at the régime of terror introduced in Petrograd, Moscow, etc.

"Prompted by the single purpose of satisfying their hatred against an entire class of citizens, without being authorized by any governmental authority, armed men, day and night, break into private dwellings, steal and plunder, and arrest and throw into prison hundreds of unfortunates who have nothing to do with the political struggle, and whose only guilt consists in belonging to the class of the bourgeoisie, the extermination of which is being preached by the leaders of the communists in their newspapers and their speeches. The distracted families are denied every possibility of finding out where their members are confined; they are refused permission to see the imprisoned or to bring them needed food.

"Such acts of terrorism on the part of men who boast that they want to bring about the happiness of the entire human race, are incomprehensible, and they arouse the indignation of the entire civilized world, which is now learning about the events at Petrograd.

"The diplomatic corps has deemed it necessary to convey its indignation to the People's Commissary, Zinovieff. It protests energetically against the arbitrary acts occurring every day. The representatives of the neutral Governments reserve for their Governments the right to demand of the persons guilty of these arbitrary acts the needed satisfaction and personal legal responsibility. The diplomatic corps requests that this note be brought to the attention of the Soviet Government."

This official condemnation of organized brutality reveals one side of Bolshevik rule. A striking picture of the general chaos which this Government has created in Russia is given in a public statement of Titoff, Socialist member of the Russian delegation

which visited London in January for the purpose of informing the Government and people of the critical conditions in Russia. The delegation consisted of Shebeko, late Russian Ambassador in Vienna, and Gurko, brother of the famous general, both Conservatives; Tretjakov, a Liberal, and Titoff and Krovopuskov, Moderate Socialists.

Titoff, in a public statement, said:

"Under the cloak of socialism, tyranny has been restored. The situation created by the Bolsheviks in Northern and Central Russia threatens to produce general starvation, complete ruin of economic life and the annihilation of the Russian educated classes and of Russian civilization.

"All newspapers, with the exception of Bolshevik publications, have been suppressed and the right of arranging public meetings is only given to the Bolsheviks. Not only the Bourgeois, but all the Socialist parties have been branded as counter-revolutionary. All prominent members of these parties who were unable to escape have been arrested and thrown into prisons with common criminals, and they only receive food brought in by their relatives.

"Justice and law courts do not exist. The prisons are crowded with people who are detained without any legal grounds. For the most part, youngsters of eighteen or less have replaced dismissed magistrates and their examinations are veritable tortures and very often culminate in executions without any trial. People are frequently shot by their guards when being taken from one prison to another.

"All industrial and commercial enterprises have been nationalized, and most of the works and factories are at a standstill or have been obliged to reduce their output to the utmost. Even discharged workmen get wages for several months in advance from Government funds. An enormous army of commissaries and clerks, consisting mainly of Bolsheviks, are receiving enormous salaries.

"This swallows up millions from the national resources, forcing the Soviet Government to flood the country with worthless paper money. The financial system is utterly destroyed and banks are abolished.

In case this picture of Russian conditions may be regarded as suspect because it is the statement of a delegate sent to Allied countries by those interested in correcting such conditions, the following extract from an article printed by *The Nation*, the British Liberal review, is not open to

the same criticism. *The Nation*, which dismisses most of the witnesses against Bolshevism as "utterly discreditable", says, however, that Maxim Gorky "at least is above suspicion. In the modern literature, not merely of Russia, but of the world, he occupies a place apart." Gorky's description of the conditions under Bolshevism, which were published in *Novaia Zhisn*, which he founded at the beginning of the Revolution, are as severe an indictment of the Government as that of Titoff. To quote from *The Nation*:

"From day to day, Maxim Gorky chronicled what he saw, and almost daily he renewed his passionate appeal that the leaders of the revolution should be conscious of their responsibility, and should give the masses the light without which they lived and perished as the beasts. With the first Bolshevik outbreak of July, his voice becomes more desperate. He sees in the endeavour to rouse the ignorant people against the revolutionary Government deliberate criminality. He describes scenes which must convince his audience that the indictment he is slowly shaping is true. The November days come, and with them an increase in Gorky's fear, and also of his conviction that the Bolshevik leaders are deliberately setting themselves to arouse all the beastlike instincts in the ignorant mob, not with any view to a subsequent reconstruction of society, but merely in order to gratify a cold-blooded intellectual curiosity. The new Government allows no books to be published. All newspapers, save those which incite their readers to acts of redoubled violence against the bourgeoisie, are suppressed. The Commissary of Education abolishes the great Russian writers from the schools and replaces them by a modern poet who has won notoriety by his glorification of the obscene. The peasants are blockading the towns, and the Bolsheviks, who know that their power depends on the acquiescence of the peasantry, connive at their extortions. Most of the Soviet officials are themselves engaged in the illicit trade. The Red Guards, the railway workers, and the Bolshevik officials alone are fed, and the sole ray of light in the growing darkness is the news that one group of railwaymen—a very small group, alas!—has refused to accept the unequal treatment.

"I cannot love the proletariat," says Gorky, "but I can forgive it. It is stupid and cruel because it does not know. But Lenin is not to be forgiven. What has he, the grand seigneur, to do with the proletariat? He is a ruthless experimenter

with the lives of men. He has deliberately sought for anarchy and provoked it, not in order that good may come out of the chaos which he has created, but merely in order to see what will emerge. One day the people will understand what Ulianoff-Lenin has done to them, how he has made them beasts that he may treat them as beasts; and then they will turn upon him also. Till that time there is one hope in the midst of so great despair. By this orgy of indulgence the beast instincts in the people may be glutted, and at last in a final paroxysm the devil of cruelty and bestiality cast out."

Titoff's statement of the failure of industries under the Bolshevik policy of nationalization is supported by a host of statements from authoritative sources. Dr. E. J. Dillon, an authority on Russia, who received the degree of Master of Oriental Languages at the University of Petrograd and was professor at the University of Khar'koff, declares that the Bolshevik Government has no future, since it is utterly impossible to carry on industry and commerce on the lines on which the Bolsheviks work. He adds:

"Not ten per cent. of the factories of Russia are working at the present time. Industry is practically at a standstill, because under the system of the Bolsheviks the factories have been seized by workmen who have no capital to carry on the industries. Of course, many workmen got a great deal of money, but what happened was simply that they took money and used it up on themselves and the things they were interested in or wanted to spend it for, and then there was none left. There is nothing left now. Economically, it is absolutely impossible for the Bolshevik Government and the Bolshevik system of running things to last."

The experiences of the banks are described by Frederick M. Corse, General Manager in Russia of the New York Life Insurance Company. Mr. Corse recently returned to New York City after seventeen years' residence in Russia. He says:

"The Volga Kama Bank was one of the biggest and richest in Petrograd. It was like the National City Bank here. I had the largest account in it. The Bolsheviks, early in 1918, deposed its president and board of directors and put a man who had been the bank's rear yardman in charge

of the bank. I had to deal with him and he was still there when I left.

"All private banks had this same experience. Multiply the Volga Kama Bank's experience by a thousand and you have the situation. To draw 150 roubles took three days, with all sorts of preliminaries such as getting permits and visés in different parts of the city. But if you paid to certain lesser Bolshevnik functionaries 25 per cent. of the amount that you drew, you could draw a million roubles.

"When I left Russia, the efficiency of industries had been reduced 70 per cent., and the results of the committee system were the gradual closing of factories and shops everywhere. There is a lack of skilled men. Cost of production is too high. The labour committees are utterly ignorant of administration, and make no provision for depreciation. Much machinery has been wantonly destroyed by rowdiness, spite and grudge."

This statement of the ruin of industry by Bolshevism is supported from numerous sources. As an example of repeated press statements, the following from Berne to *The New York Times*, on December 23, may be quoted:

"Reliable information from Russia brings confirmation of reports that the socialization of industry there is a complete failure. Official statistics show that in almost all the 513 mills and factories controlled by the State expenses have considerably exceeded receipts.

"During the first four months of 1918 the Government paid out over 400,000,000 roubles to cover these deficits, and has been obliged up to the present to advance over 1,000,000,000 roubles to the factories under its control. Technical experts assert that Russian industry has been crippled for many years to come by the Bolshevnik régime."

If more official information is demanded, it is contained in numerous speeches by Mr. Lloyd George. Speaking on production in a great statement to Labour during the recent election campaign, he said:

"Bolshevism is the poison of production; Russia proves that. Russia will not begin building up a productive system until Bolshevism has worked itself out. Meanwhile there will be great suffering and penury throughout the land and all classes will suffer alike."

Again, while condemning class government in his final campaign speech, he said:

"In Russia you have got now the claim that government must be entirely in the hands of one class. They won't allow the other classes even to vote. What is the result? The result is chaos, anarchy, confusion. Have the working classes benefited? There is starvation there, there are people dying by scores of thousands for want of food, credit is gone, there is no work, there are massacres all over the place, and Heaven knows what is going to happen in Russia.

Striking testimony to the true character of the Bolshevnik régime is contained in an article on "Bolshevnik 'Industrial Government'", prepared by Gustavus Myers for the League of National Unity, which appeared in *The National Civic Federation Review*, on December 20. In this article Professor Ludovic H. Grondys, a Socialist, gives much first-hand information gathered during a long tour of Russia recently. "At the outbreak of the war he was Professor of Physics and Mathematics in the Technical Institute of Dordrecht, Holland, and also one of the editors of *The University Review of Philosophy*, Holland. He is now correspondent for *L'Illustration* and *Le Temps*. En route to Siberia, he was in New York in October, 1918, and there gave ample details of the Bolshevnik experiment, as quoted in *The Review*.

"He said: 'Almost all the Bolshevnik leaders are people who have returned from America. These were supplemented by an immense swarm of criminals released from Siberia, as also liberated criminals from the prisons in Moscow, Petrograd and other places. A certain number of those exiled to Siberia under the old régime were political prisoners, but a far greater number were actual criminals.

"The first thing that these did after getting back to Russia was to burn courts and police courts. They thus destroyed records and Rogues' Galleries. With the records of their criminality destroyed, they could safely pose as political martyrs. With great assurance they did so. This explains why so many criminals became Presidents of Soviets, and this helps to explain also the bloody conflicts between villages, and

why so many criminals are in control. Every town and village has the right to have a Revolutionary Tribunal, and can decree anything it pleases. All laws have been abolished. Only those having certificates of being thorough-going Bolsheviki can be elected to Soviets or Revolutionary Tribunals. The principle (!) prevails everywhere that 'Anybody who has been in Siberia and has suffered from the law ought to know something about it.'

"While on the subject of the criminals running Russia, it is well here to advert to a description of some of them given by General A. Dobrajansky, who recently arrived in New York City as the representative of a group of united Russians. General Dobrajansky says:

"As an instance of the calibre of men composing the various Soviets, (self-elected representatives of the Workmen's and Soldiers' Committee), let me cite a few names of the members of the Soviet of Blagowestchensk. We have the President, Tobelson, a German spy, ex-jailbird and robber; Mochin of the Executive Committee, a deserter from the Russian army, a counterfeiter and ex-jailbird; his assistant, Tchatskovsky, also an ex-jailbird; Commissioner of Prisons, Emilianoff, ex-jailbird and robber; his assistant, Nakileff, previously condemned to jail for robbery; the Commissioner of Food, who was convicted for misappropriation of funds; Korovin, Commissioner of Schools, an ex-jailbird; Tillick, convicted for robbery, now Commissioner of Finance; Mithin, Commissioner of Militia, an ex-jailbird, and finally, we have as Commissioner of Health, an illiterate peasant. And these are the men who are at the head of affairs in Russia to-day!

"To return now to Professor Grondy's statement:

"Does the Soviet system represent the people's will? you ask. It does not. It is forced on the people. There are no real elections. The Bolsheviki use the Red Guards to pack assemblies and force their candidates. Voters are exclusively Bolsheviki, and only Bolsheviki or those having no property can be eligible to office. This claim of Bolsheviki being propertyless is not true. Many of them have amassed money. In all my tour I met only a few of them who were honest. School-masters are not eligible for Bolsheviki village Soviets. They are too intelligent, and are regarded as intellectuals.

"Soviets have been the great craze. Every great apartment house has a Soviet. Every factory was put under the domination of a so-called Council of Workmen. I personally saw the application of the theory to many factories. For example, Koopp's agricultural machine factory, employing 500 men, at Alexandroffsky, near Rostoff. The Council of Workmen in this

factory voted to make Koopp an employee at 500 roubles a month, and made one of the loudest talking workmen (who was also President of the Soviet) Director of the factory. They voted themselves salary increases of from 800 to 1,000 per cent.

"Every day the workmen held meetings, sometimes lasting several hours, in the factory. There they discussed their rights and privileges, but the words duties and obligations were unknown to them. They also voted themselves the right, 'as an intellectual necessity', to read newspapers during supposed working hours. Nominally, they 'worked' eight hours, but literally, not more than four and a half a day. But they paid themselves for all time spent in meetings, reading newspapers and loafing."

The article continues with example after example of the destruction of industry and gives some striking details of the fate of workingmen who refused to follow the Red Flag. It quotes from the speech of Colonel Vladimir I. Lebedov, which he delivered in New York on December 2, 1918. Colonel Lebedov was Secretary of the Navy under Lvov and Kerensky, but left the Kerensky Cabinet because of failure to take strong measures against the Bolsheviki. He now holds the office of Associate of the Secretary of War of the Russian Omsk Government, in behalf of which he visited the United States.

Colonel Lebedov said in his New York speech:

"The Bolsheviki are shooting down the workingmen far more ruthlessly than under the old régime. They have been shooting them by the thousands in frequent massacres. In normal times there were about 400,000 workingmen in Petrograd. Early in the war there was a great influx of peasants who went to Petrograd to work. After the Bolsheviki seized power, hundreds of thousands of workers, mostly unskilled, left Petrograd for the country districts. By May, 1918, there were only 132,000 workingmen left in Petrograd, but these were the best kind of skilled labour. They had always lived in Petrograd and had nowhere else to go.

"In May, 1918, they began to revolt against the Bolsheviki. They held several enormous mass meetings which, because of the great numbers present,—more than 100,000 in all—the Bolsheviki were afraid to molest. They elected representatives and drew up resolutions denouncing the Brest-Litovsk treaty as a shameful peace

which they didn't recognize, and declaring that, instead of peace, the Bolsheviki brought internal wars, and instead of bread they brought famine. The resolutions further asserted that, instead of liberty, the Bolsheviki had established a reaction to such an extent as never had existed in Russia. The workmen demanded the resignation of the Bolsheviki Government, and the election of a Constituent Assembly. They sent delegates secretly to all Russian cities. In Moscow the workmen adopted similar resolutions. Here, too, the Bolsheviki were afraid to take action. But in the provincial cities, where the meetings were smaller, the Bolsheviki imprisoned or shot thousands of workmen in cold blood.

"As for the delegates elected by the workmen of Petrograd and other cities to the Soviets, the Bolsheviki Government would not allow them in those bodies. The Bolsheviki would not permit any Socialist, trade-unionist or labourite in the Soviets. They ordered the Red Guard to shoot them, and this was always done."

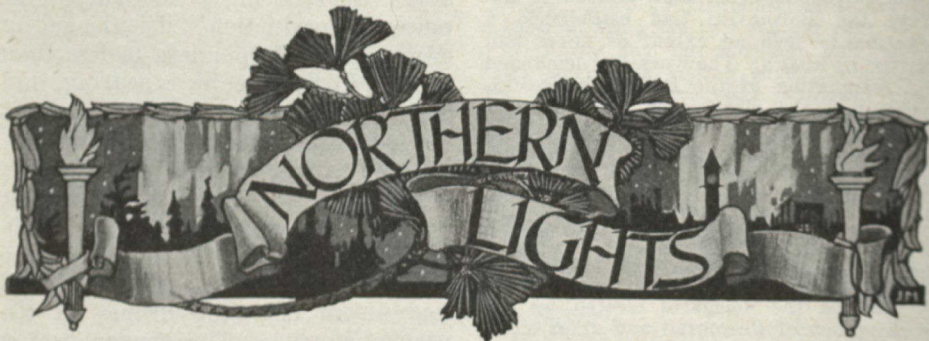
As a final evidence of the disastrous results of Bolshevism, we may quote from a special article in *The Fortnightly Review* of last December by Sir George Buchanan, who was appointed British Ambassador to Petrograd in 1910, and continued there for more than a year after the Revolution:

"Nobody's life is safe—all their political opponents, whether belonging to the Socialist or non-Socialist parties, to the working class or to the aristocracy, are styled counter-revolutionaries, and as such are judged guilty and condemned to death. The process of passing sentence on individuals is even found too slow, and they are massacred in batches, the Red Guard or the Chinese mercenaries employed as executioners being free to choose their victims from the lists of the proscribed. Such are the methods by which those pseudo-democrats, Lenin and Trotsky, have attempted to found their Socialistic State, and such are the precepts of the Bolsheviki gospel which they fain would see preached in this and other countries. The sympathy felt in certain quarters for Bolshevism is due entirely to ignorance of what Bolshevism really are. They are not democrats as we understand the meaning of that word. They are anarchists, and I am convinced that were any of our so-called Bolsheviki to go to Russia and see with their own eyes the crimes that are being committed there in the name of liberty, they would never call themselves Bolsheviki again."

In the face of such evidence, it is amazing that Bolsheviki literature should have such a circulation in Canada. Bolshevism is not only "the poison of production", it is the enemy of progress. It panders to less than mediocrity and denies a hearing, and often a livelihood, to those who possess any personal initiative or ability. It is a foe to free speech. Not through Bolshevism will the world-dream of peace be realized or people be made happier. With it there can be no safety for democracy. Under its limited vision only the drones of the nations survive. The temper that is needed to repair the ravages of war and to reconstruct the world is the temper that found expression in the final campaign speech of Mr. Lloyd George in the recent British elections. We have already quoted his condemnation of Bolshevism as the poison of production:

"There is one condition," he said, "for the success of all efforts to increase the output of this country—confidence. . . You must give confidence to all classes, confidence to those who have brains, to those who have capital, and to those with hearts and hands to work. I say to labour: You shall have justice; you shall have fair treatment, a fair share of the amenities of life, and your children shall have equal opportunities with the children of the rich. To capital I say: You shall not be plundered or penalized; do your duty by those who work for you, and the future is free for all the enterprise or audacity you can give us. But there must be an equal justice. Labour must have happiness in its heart. We'll put up with no sweating. Labour is to have its just reward. And when the whole world sees that wealth lies in production, that production can be enormously increased, with higher wages and shorter hours, and when the classes feel confidence in each other, and trust each other, there will be abundance to requite the toil and to gladden the hearts of all. We can change the whole face of existence."

The salvation of the future is not to be found in conflict between classes, but in the closer association of all elements. By such association the whole face of existence can be changed indeed.



A DEPARTMENT OF PEOPLE AND AFFAIRS

MR. J. E. DALRYMPLE



HE romance of modern business contains few more inspiring stories than that which is to be found in a review of the careers of the Vice-Presidents of the Grand Trunk Railway, who direct the traffic, operation, finance and other activities of that great railroad system. It is a story of endeavour, dogged and grim, of natural ability and of strength of character, and Canadians may be justifiably proud of it. It outlines the achievements of a little group of boys who entered the service of the railway at about the same time and who have steadily pursued success within the confines of the one corporation, until to-day they have not only risen to executive authority and vice-presidential rank, but have also become associated with many of our great enterprises outside the railroad sphere.

A notable member of this vice-presidential family, Mr. J. E. Dalrymple, has been receiving during the early days of this year the congratulations of his associates and of business men in general upon rounding out a half-century of life and completing at the same time thirty-five and a half years of service with the Grand Trunk Railway. The traffic arteries, upon the

pulse of which this comparatively young man keeps an ever sensitive finger, serve eighty-nine per cent. of Canada's urban population grouped in its forty principal cities. They include not only the Grand Trunk Railway, but the Grand Trunk Pacific Railway, the Grand Trunk Pacific Coast Steamship Lines, and other subsidiaries. It is a real job, being Vice-President in charge of traffic on a system whose gross earnings reached about one hundred million dollars last year. To fit the holder for the successful performance of the duties which the position involves, varied and wide experience, a capacity for getting things done, and sound, keen judgment are essential. Mr. Dalrymple has proved in the seven years which he has held that office that he possesses these qualifications in a marked degree. His first efforts in the business world were those of a very youthful junior clerk in the Treasurer's office of the Grand Trunk Railway at Montreal, his native city. The traffic manager of the Chicago and Grand Trunk Railway took him out of the financial department and made him his secretary, and he later occupied a similar secretarial post with the general manager of the Grand Trunk Railway System, Mr. George B. Reeve. With an intimate knowledge of the policy and history



Mr. J. E. Dalrymple, Vice-President of the Grand Trunk Railway.
Who recently celebrated the completion of his thirty-fifth year
in the service of that System

of the road and with spurs already won as a young and promising railroad man, he next sought experience in the field, among shippers of freight, and became in turn Division Freight Agent of the Grand Trunk Railway at Hamilton and Detroit, and General Freight Agent of the Central Vermont Railway. He was assistant to the General Manager of the Grand Trunk System from March, 1901, to April, 1902, when he returned to the Central Vermont Railway to handle the growing freight traffic of that road. His success in that position led to his being chosen in 1905 as General Freight Agent of the Grand Trunk Railway System, and in 1908 he went to Winnipeg as Assistant Freight Traffic Manager of the Grand Trunk Pacific Railway and Steamships.

The late Charles M. Hays recalled Mr. Dalrymple, at the age of forty-three, to Montreal as Vice-President of the Grand Trunk, Grand Trunk Pacific and Central Vermont Railways. In this vice-presidential office he has played an important part in developing the traffic of the system to its present magnitude.

*

SERGEANT GOOD, V.C.

TWICE during the war—on January 11th and September 27th, 1918—the *London Gazette* has contained the names of no less than seven members of the Canadian Expeditionary Force who have been awarded the Victoria Cross "for valour".

In the more recent of these two lists



Sergeant Herman Good, V.C.

appeared the names of two New Brunswick men, Corporal (now Sergeant) Good and Private Croak—a matter of pride and rejoicing to the whole Province, for as it happens, they were the first of its sons who had enlisted with the Canadian forces to win the unpretentious bronze cross, recognized, throughout the Empire and beyond it, as the outward symbol of the highest courage, initiative and self-sacrifice.

The little town of Bathurst, in Gloucester County, on Chaleur Bay, claims Herman James Good as one of its own boys. He was born near Bathurst on November 29th, 1888. He was educated in a country school not far from the town, and his father and mother, Mr. and Mrs. Walter Good, still live at Big River, in the neighbourhood.

The recruiting officer may well have congratulated himself when the future V.C. enlisted, for "physically he has always been an almost perfect specimen of manhood", and, "to those who know him best, it is not a very surprising thing that Herman Good has shown himself of the stuff of which heroes are made". His stalwart figure was not one to be passed unnoticed even in a crowd. Fair-haired, blue-eyed, five feet eleven in height, nearly two hundred pounds in weight, with thews and sinews exercised in heavy out-door work from his boyhood onward, the young man was cut out, it would seem, for the part of principal in such a single-handed encounter against mighty odds as the old ballad-makers loved to celebrate and immortalize in song.

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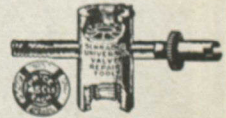
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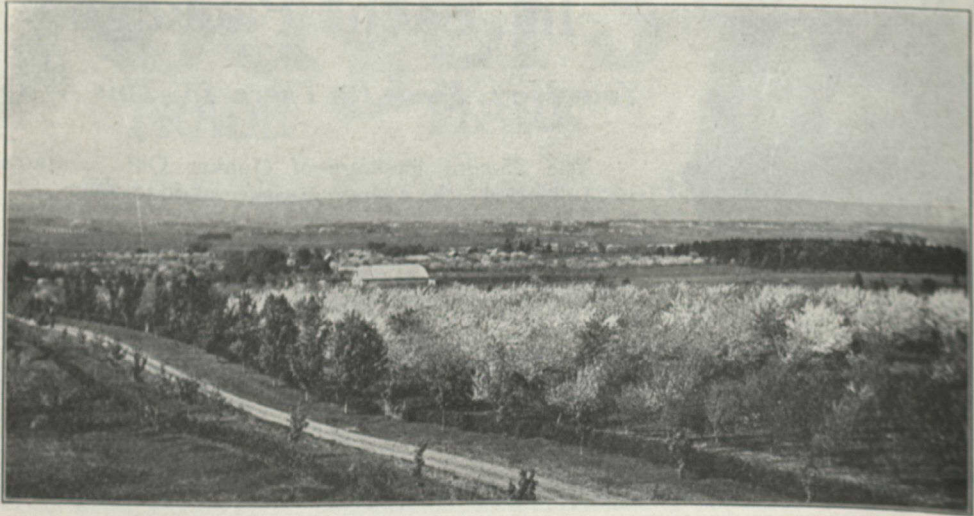
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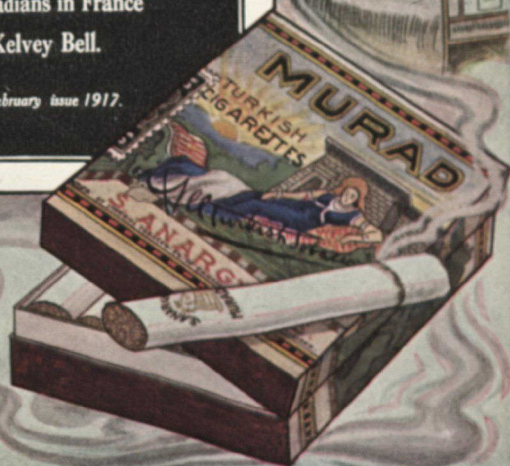
To them the cigarette is the panacea for all ills. I have seen men die with a cigarette between their lips, the last favor they had requested on earth. If the soldier is in pain, he smokes for comfort, if he is restless he smokes for solace; when he receives good news he smokes for joy; if the news is bad, he smokes for consolation; if he is well he smokes, when he is ill, he smokes. But good news or bad, sick or well, he always smokes.

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Canadian Magazine, February issue 1917.

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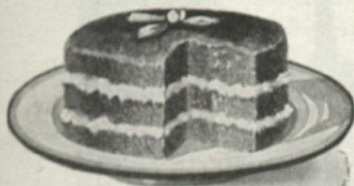


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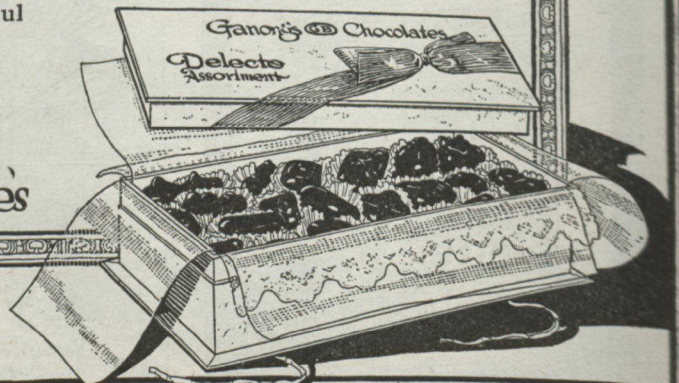
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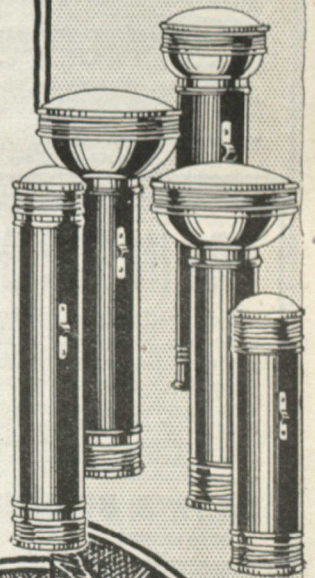
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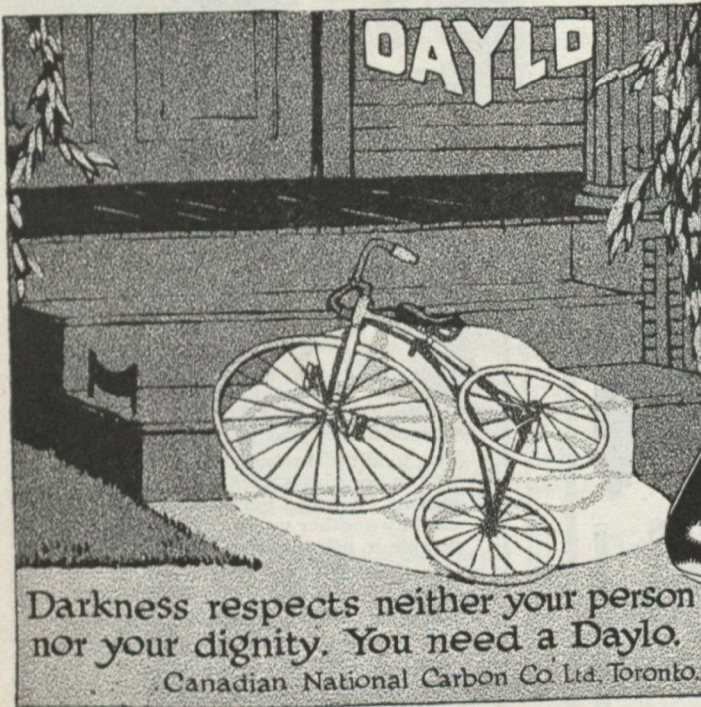
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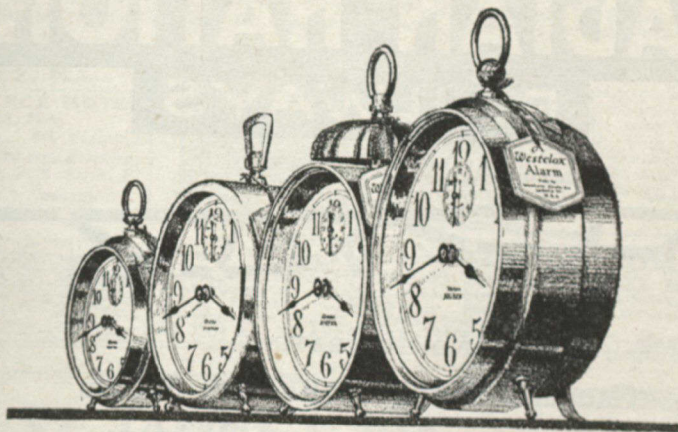
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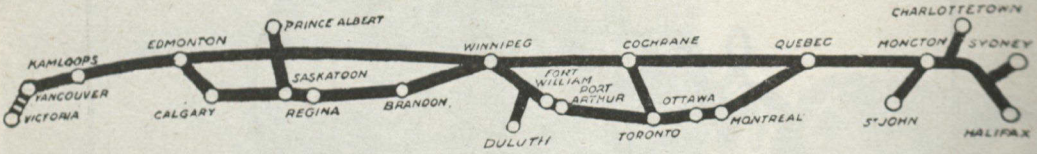
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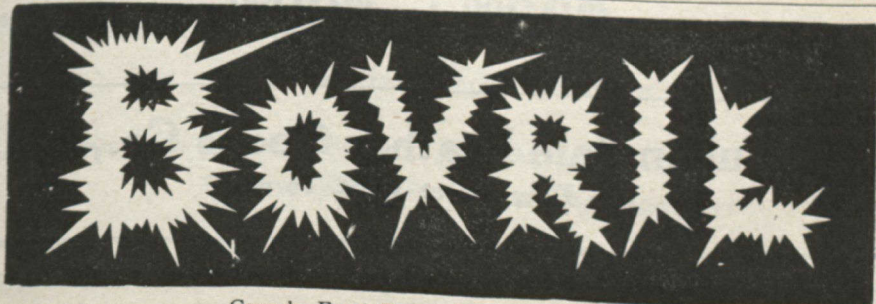
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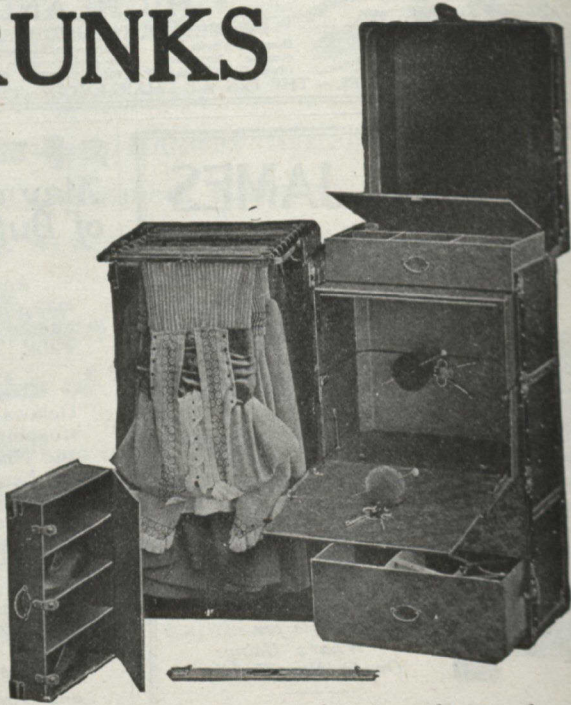
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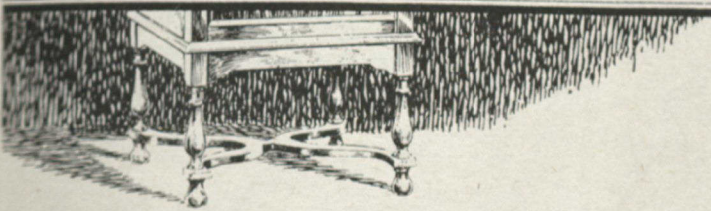
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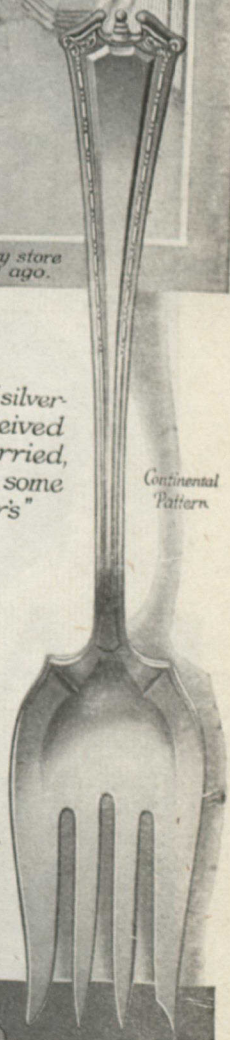
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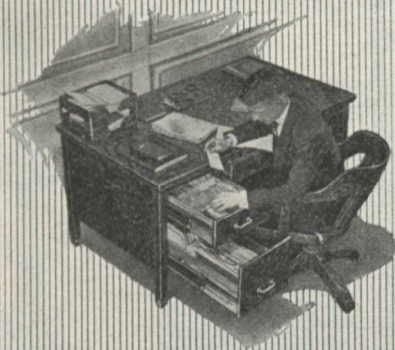
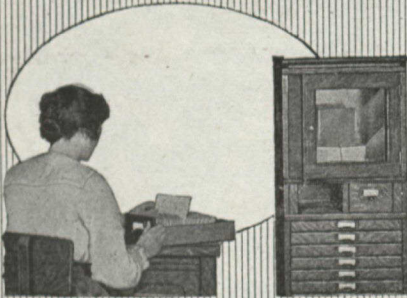


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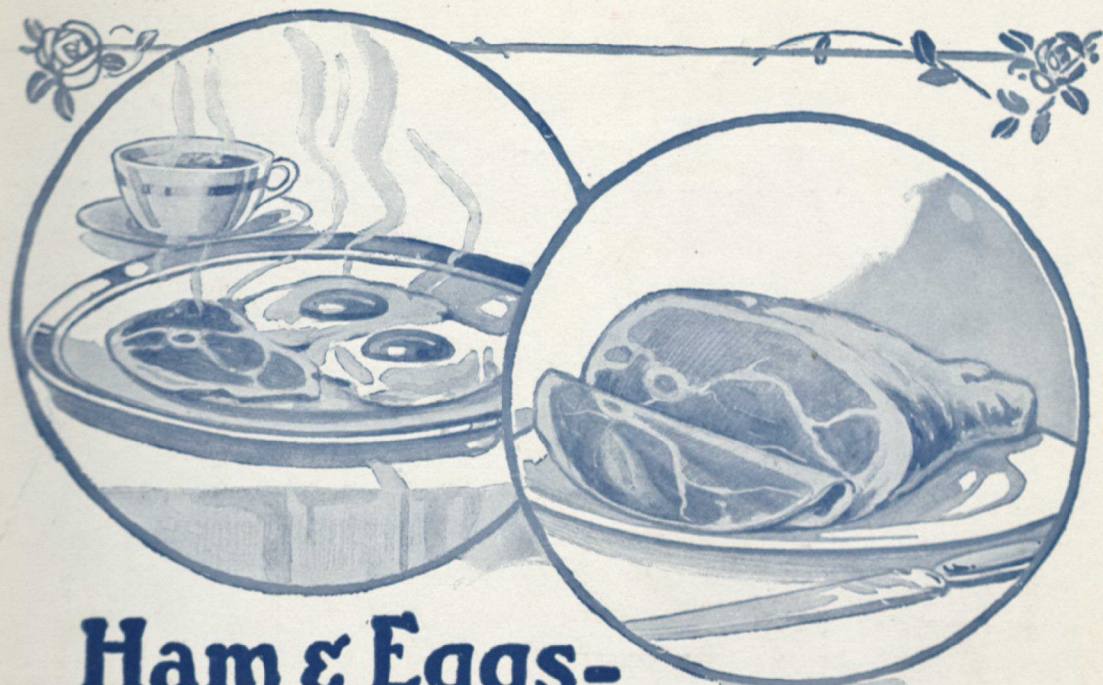
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