#### Driving Huge Tunnel Through The Rockies

Coping with physical handicaps which for many years baffled some of the world's greatest engineers, the Canadian Pacific Railway is now projecting a scheme of greater magnitude than anything of its kind previously attempted on this continent-the boring of a five-mile doubletrack tunnel through Mount Macdonald. one of the peaks in the Selkirk Range. grade to normal on the "big hill," spent with covered passage-ways raised above passage will obviate the present ssity of using two long spiral "loops" on the western slope and many miles of snow sheds, the improvements being desnow sheds, the improvements being de-signed to effect a big grade reduction and developed the tunnel scheme which and the abandonment of one of the most is now being projected—a bore five miles costly sections of railway, from an operation point of view, on the entire system. Longest Rallway Bore.

The new location for the line will shorten the route by four miles. The enterprise is officially known as the work and related improvements will involve the expenditure of more than \$10,-000,000. The tunnel will take rank as the longest bore in America. The Hoosac tails had to be given attention. When

Since the Canadian Pacific Railway first onened its transcontinental line through ended millions of dollars in protecting and renewing its tracks, on extra locomotives used to haul trains up the heavy grades, and in coping with snowfalls and other physical handicaps which keep a large force of men and a large amount of expensive equipment busy nearly all the

#### WEAKNESS AND PALPITATION OF THE HEART.

When the heart begins to beat irreguand sometimes seems to almost stop, it causes great anxiety and alarm.

Many people become weak, worn and miserable, and are unable to attend to either social, business or household duties.

Milburn's Heart and Nerve Pills are specific for all weakness and heart disorders, and are recommended by us with the greatest of confidence that they will do what we claim for them.

Mrs. George Burridge, Coboconk, Nerve Pills have done for me. I have been troubled with weakness and palpitation of the heart. I tried many remedies but got none to answer my mend them highly to all with heart or

all dealers, or mailed direct on receipt of

## HAVE YOU

Many women long for children, but because of some curable physical derangement are deprived of this greatest of all happiness. The women whose names follow were restored o normal health by Lydia E. Pinkham's Vegeta-le Compound. Write and ask them about it.



"I took your Comound and have a fine, strong baby." - Mrs. JOHN MITCHELL, Masena, N. Y.

"Lydia E. Pinkham's wonderful medicine for expectant mothers."-Mrs. A. M. MYERS, Gordonville, Mo.

"I highly recommend Lydia E. Pinkham's Vegetable Compound before child-birth, it has done so nuch for me."-Mrs. E. M. DOERR, R. R. 1, Conhohocken, Pa.

"I took Lydia E. Pinkam's Vegetable Compound to build up my system and have the learest baby girl in the world."- Mrs. Mosa BLAKELEY, Imperial, Pa.

"I praise the Comound whenever I have chance. It did so much for me before my little girl was born." - Mrs. E. W. SANDERS, Rowlesburg, W. Va.

"I took your Comound before baby was orn and feel I owe my life to it."-Mrs. WINNIE TILLIS, Winter Haven,



Work Begun Last June. The engineer who had charge of the rooms and sleeping quarters are provided tunnel undertaking which reduced the for the men, the houses being connecte two years seeking a favorable location for a tunnel through the Selkirks. He discovered a route six and a quarter miles long, and later improved on his first plan in length.

The C. P. R. decided on the Rogers Pass tunnel undertaking and relating double-tracking work last spring, preliminary operations being started last June. Be-fore the work could be commenced on the ise is officially known as the excavation for the approaches, sidings "bootleggers" from plying their nefarious Pass tunneling scheme, and the had to be installed on either side of the trade around the camps. Liquor selling is mountains, camps had to be established, trails and roads had to be built, and a thousand and one other organization denel, on the New York Central line, is representatives visited the scene of operthe longest at present, being just four ations late last month, 40 per cent of the and three-quarters miles through. western section of the work had been done, and 35 per cent at the eastern side. Boring operations on the "pioneer" bore, which will be described later in this article, were commenced last autumn and a start made a short time ago on the main tunnel from the eastern portal.

Rock-Bound Barrier.

Of the many peake which form a seeming impassable rock-bound barrier to the west, Mount Sir Donald, named after the at Glacier. late Lord Strathcona, when he was Sir Donald Smith, forms the culminating pinnacle, its altitude being 10,808 feet (nearly two miles). Mount Macdonald, which i 9,860 feet in height, also looms out promiently with rugged and precipitous sides. Great difficulty was experienced by the builders of the line on the section west of Bear Creek. Many torrents tumbling down the mountain sides in splendid cascades had to be diverted by culverts into the river below, and others had early, palpitates and throbs, skips beats, to be spanned. The greatest of the numerous bridges is over Stoney Creek, a mountain stream which is seen threading its course 300 feet below like a tiny silver thread, making a glorious filigree through dark and narrow chasms. The structure, which is the highest of its class, replaced a wooden trestle bridge considered one of the engineering marvels of the world. Tunnel Replaced Snow Sheds.

The new line will be located on a level The closer to the base of the valley. railway parallels the course of Bear Creek railway parallels the course of Bear Creek degeneracy in a family is the selfishness ested in many concrete things; and these after leaving the station bearing that and meanness, or the cunning, avarice, and meanness, or the cunning, avarice, and moral guile, by which the self-made him happiness, distract him from the congrade through nearly five miles of sheds, themselves engineering marvels, erected Ont., writes .- "Just a few lines to let at tremendous cost to insure the safety of you know what Milburn's Heart and the trains from the slides which frequently tear down the rugged mountain slopes, sweeping before them huge boulders and forest monarchs in their titanic might. These sheds of necessity had to be of massive construction to resist the terrific onslaughts made upon them. They are case like your pills did. I can recom- built of stout framed timber, dovetailed and bolted together, and set and reinforced with rock. Between Bear Creek and the summit, and for a corresponding acquire vicious habits and criminal pro-Milburn's Heart and Nerve Pills are distance on the western slope of the cents per box, or 3 boxes for \$1.25, at Selkirks, large forces of men are kept their careers in the madhouse or prison. constantly employed for eight months of the year keeping the lines open for trafprice by The T. Milburn Co., Limited, fic. Rogers Pass is the headquarters for cipal points and the tracks are constantly cess was almost a proof of virtue. At

on the extreme summit last August, the western camps sighted their instruments from both valleys and checked up their previous calculations in order to insure perfect accuracy in projecting their respective bores. The pole at the summit indicates the alignment of the tunnel, while a route surveyed around the slopes of the mountain gives the basis for the

triangulation. The exact location of the tunnel will be determined by the two courses mapped out over and around Mount Macdonald and by mathematical processes too technical for detailed description here. The Vegetable Compound is a highest point reached by the proposed tunnel will be 3,795 feet above sea level, or 4,065 feet from the extreme height of the peak. The passage through the mountain will have a gradual rise of one per cent to the "interior summit."

Subsidiary Tunnel First. The contractors who have in hand the tunnel scheme are applying an entirely new method in tunnel piercing-they are projecting what is known as a "pioneer bore." This is a small preliminary shaft, seven feet by nine, which will parallel the course of the main tunnel fifty feet distant, and will be bored from both ends at the same time. The idea is quite in the nature of an experiment, and was decided upon only after careful calculation and nature consideration.

One of the principal reasons for the adoption of the new plan was the fact that the C. P. R. wished to have the big undertaking finished by December 31, 1916, three years and a half from the time the work was started. Building a passage five miles long is a lengthy process in the ordinary way. Only a limited number of men can work in the heading at one time, and delays constantly occur on account of blasting and other causes.

With the "pioneer" bore the work will be facilitated. Side drifts will be exmain tunnel, and drillers will thus be able to continue their activities in another, instead of having to cease work each time a shot is fired, as would be the case with one heading. The same applies to the excavation part of the work. Lines of cars loaded with material can be kept constantly in motion from the various drifts, which would not be possible were the operations concentrated all at one

Another great advantage is the fact that the "pioneer" bore will act as a ventilating shaft, enabling the passage of a current of air through two bores and the connecting passages. It will also serve a permanent purpose in the same connec tion on the completion of the main tunnel Work on the cuttings is being presse night and day, two shifts a day being employed outside. A force of 500 men is now engaged, 300 of whom are at the western end and 200 at the eastern section. Special gangs are engaged con-stantly during the winter months keeping the working tracks clear of snow. A large amount of machinery is used by the contractors, among the equipment being compresser plants for the air drills, large eam shovels, lighting plants and motor

of various kinds.

Temporary Workers' Towns.

Model villages have been establis

PLUCKY AMERICAN TO



Alfred Brown.

New York, June 26.—Capt. Alfred Brown, another American, is going to try to swim the treacherous English Channel trouble that is caused by the smuggling Last year Brown swam from the Battery into camp of large quantities of flery to Sandy Hook, and this swim is consid ered by water cracks as difficult as the Two different kinds of weather are English Channel. If successful in his atoften experienced at the two sections of tempt, Brown will receive the Alexande the tunnel project at the same time. At trophy, a silver cup offered by a London the western end the temperature may be promotor of water sports.

distant on the other side of the range it from both sides at the same time. Work may be considerably below zero. More on the "pioneer" bore has been advanced snow falls on the western slope than on at the eastern portal nearly a thousand the eastern side. The snowfall, when the feet into the base of the mountain, and a writer visited the scene of operations, had start has also been made on the main bore from the east end. Operations will Last winter 57 feet of snow was recorded be commenced on the preliminary shaft and the large tunnel at the western end Gangs of drillmen will be employed at an early date. The excavations for the in three continuous shifts on the tunnel approaches at both sides, as already men excavation work which will be prosecuted tioned, are almost half completed.

### HERE'S A BRAND NEW OF THE SELF-MADE

the Times.

dinary railway camp. Roomy dining-

There are well-stocked stores at both camps, comfortable lounging rooms, post-

office and other institutions found in small

Emergency hospitals and surgeons are maintained at both villages, and there is

a regular police force. The constables are

kept constantly on the alert to prevent "bootleggers" from plying their nefarious

rigorously suppressed, for no one knows

better than the railway contractor the

comparatively mild, while a few miles

been about 25 feet thus far this season.

his still more degenerate children to spend any kind, whether it be high or low. in gratifying their selfish desires. The family seems to be on the up-grade because, in one generation, it makes a

worldly success; but this success is a sign of disease rather than of healtn, and soon the disease has not even to conceal it.' "Whereas the parents to gratify their elfish desires succeeded by work and abstemiousness, the children possessing the same selfish instinct with no need to work, and supplied with abundant wealth, pensities, and not infrequently terminate talk of fixed ideas as if they were signs

World Success and the Energy of Fever. from the west side, as it drops down did not consider in their relation to other practically sheer on the eastern slope. virtues. He was, in fact, a kind of bour-When the signal flag was being planted goods Nietzschean before Nietzsche, and worshipped strength and pertinacity in staffs of engineers at the eastern and the language of a morality very incongruous with his own.

"But now Dr. Mott tells us that this strength which he worshipped is not

CARDINAL HARTMAN NAMED IN COLLEGE; **GERMANY IS HAPPY** 



Cardinal Hartman Cardinal Hartman, Archbishop of Cologne, is a member of the new Sacred College at Rome. His appointment was

of particular interest to Germany, all of cavated leading into the course of the the German cardinals having died recently. The Kaiser made an urgent apenabled to attack a number of points at peal, at the time of Cardinal Hartman's one. While blasting is proceeding in one appointment, to the Pope not to permit of part of the shaft, the workers will be the possibility of a new Pope being able to continue their activities in anrepresentation in the Sacred College.

"Dr. Mott, pathologist to the London strength at all, but weakness, both moral county asylums, differs very much from and physical, that the energy which pro-Dr. Samuel Smiles, author of 'Self-help,' duces worldly success is often the energy in his opinion of the self-made man," says of fever rather than of health, and of fever which leaves a stock exhausted, as 'According to him, 'the self-made man ordinary fever exhausts the individual is often the first step in the process of body. The normal healthy man has not a degeneration; and the first evidence of passion for success. Rather he is interman succeeds in amassing a fortune for centration that is necessary to success of

> Normal and Super-Normal Men. "But there are, of course, many different kinds of self-made men, as there are many different causes of concentration. The man who concentrates upon some thing that is not worth having is below the normal, but the man who concentrates on something that is worth doing is above it. Worldly success is an abstraction; and to sacrifice everything to that is not to

of insanity; but they are only that when they are not ideas at all. The man to "Now this theory, whether right or whom success is a fixed idea has no idea the year keeping the miss open to have exhausted themfic. Rogers Pass is the headquarters for the clearing outfits and the extra locomothe clearing outfits and the extra locomothe clearing outfits and the extra locomothe year keeping the miss open to have exhausted themwhat success means, why he wants it. or what he will do with it when he has won who only succeeds in doing that excess selves. Therefore, we cannot wonder that the property of the clearing outfits and the extra locomothe clearing outfits and the extra locomothe clearing outfits and the extra locomothe property of the greatest value to mankind, what success means, why he wants it. or who only succeeds in doing that excess selves. Therefore, we cannot wonder that the property of the greatest value to mankind, who only succeeds in doing that excess selves. the clearing outfits and the extra locomotives used to push trains up the steep grades on each side of the summit. Watchmen are stationed at all the principal points and the tracks are constantly to the clearing outfits and the extra locomotive described as it is advanced, it. He is, except for his active and positive energy, like the miser who hoards sively. It is failure, of course, not to earn of the summit. He is, except for his active and positive energy, like the miser who hoards sively. It is failure, of course, not to earn of the sons of self-made men are not only succeeds in doing that excessives. Therefore, we cannot wonder that the will do with it when he has won it. He is, except for his active and positive energy, like the miser who hoards sively. It is failure, of course, not to earn of the sons of self-made men are not only succeeds in doing that excessives. Therefore, we cannot wonder that the will do with it when he has won it. He is, except for his active and positive energy, like the miser who hoards money because it has no meaning to him. And you can win success, if you want to ceeds in life if he has no purpose except it takes are constantly as a proof of virtue. At the will do with it when he has won it. He is, except for his active and positive in the sum of science. Therefore, we cannot wonder that the will do with it when he has won it. He is, except for his active and positive in the sons of self-made men are not one considerable proportive cannot be a free man. But no man success it you want to ceeds in life if he has no purpose except it is failure, of course, not to earn the will do with it when he has won the course, not one course, not to earn the sons of self-made men are to a course, not to earn the sons of self-made men are to a course, not to earn the will do with it when he has won the will do with it when he has won to a course, not to earn the sons of self-made men are to a course, not to earn the sons of self-made men are to a course, not to earn the sons of self-made men

know why you make your sacrifices. We

least the qualities which produce worldly atrolled.

Mount Macdonald can only be climbed success were thenselves virtues which he fits uses. So perhaps Dr. Mott is sight. make himself and nothing else. Insensitive to Life's Meaning

that case he is not inferior but superior to the normal. Kar below the average great hoard; but far above him is the artist, the hero, the man of science, even if he, too, thrives. For the difference between him and the self-made man who only makes himself is that he succeeds the self-made man succeeds by doing what will bring him success. The one sets himself his own task, the other has his task imposed upon him by circumstances. The one is master, the other slave, of the world. And however much he may suceed by his slavish submission to cirhis slavery is of the mind, and no amount of material power can free him from that. Excessively Earning Your Living.

"There is the need in this life of earning

Dr. Chase's Nerve Food increases weight by enriching the blood and forming new, firm flesh and tissues. Do not confuse it with fat producing oils.

## InWeight While Building up the System with

GAINED 30 POUNDS

Was thin, pale and weak. Had frequent headaches and stomach troubles. Cured by Dr. Chase's Nerve Food.

Mrs. H. Laich, Cannington Manor, Sask., writes-"You will remember me writing you last spring. Well, I gave up my doctor and began using Dr. Chase's Nerve Food. This treatment cured me rapidly and I was soon myself again. I was pale, thin and weak, suffered from stomach troubles and liver complaint and frequently had sick, nervous

I was surprised to find that in a few weeks time I had gained 30 pounds in weight. I never felt so strong and well in all my life. Headaches never bother me any more and I am grateful for the cure. If people would only give this medicine a fair trial they would certainly be cured."

You can feel yourself gaining in strength and vitality while using Dr. Chase's Nerve Food. You sleep better, eat your meals with more relish, and digest them without discomfort. But it is also interesting to note your increase in weight for this is proof positive that your system is obtaining additional nourishment from this food cure and that new, firm flesh and tissue is being added to the body. Dr. Chase's Nerve Food, 50c. a box, 6 for \$2.50, all dealers or Edmanson, Bates & Co., Limited, Toronto.

# Nerve 11. Merve 11. Nerve 11. Nerve

Note Your Increase

"Perhaps we may call the self-made about the self-made man who sets out to man a degenerate if, when he has made himself, he does not know what to do with himself; if all his energy has brought "His success, like the miser's hoard, is him only ignorance of himself and life. merely a proof of his ensensitiveness to But it is not fair to condemn the selfthe meaning and divinity of life; and this made man, if he does not know how to insensitiveness is itself a sign of a low enjoy leisure like those who have enjoyed moral and physical organization. But a it all their life. The test of him rather man may make himself when he is trying is whether he enjoys his work, and not to make something else; he may win merely success in his work, but the work worldly success as a by-product; and in itself. If it is something that he finds worth doing for its own sake and not merely because it makes him rich, then man is the miser, even if he acquires a he has succeeded in life indeed, and not in the manner approved by Dr. Smiles.

Success Not Happiness. "For the weak point of his doctrine was that he took no account of happiness, or by doing what he wants to do, whereas rather that he took success for happiness, nstead of taking happiness for success. He preached self-denial, btu did not inquire much v.hat a man denied himself for. If he saw a man working very hard he applauded without asking whether the cumstances, he remains a slave even in the freedom that success bring him. For work. To him the lonely mystic in the wilderness would have seemed a mere tramp or, if he had known the word, a degenerate: and new a man of science applies that term of abuse to his heroes. It your own living, and it is a little strange is enough to make him turn in his grave." Genius and Insanity.

Dr. Bernard Hollander, the famous Walpole street mental specialist, answered the question, when it was put to him yesterday by a Dally News interviewer, in a different way from Dr. Mott, but to much

"I cannot hold," he remarked, "that the qualities which go to create a self-made man are in themselves signs of degeneracy, but what I would point out is that the gift of money-making is very often the product of what we call genius. My experience goes to prove that the 'man of genius' and the 'self-made man' offer much the same problem to science.

"Now, the man of genius has not inrequently a pathological taint-or, rather, his family has such a taint. Certain nervous tendencies in the stock appear to produce these isolated instances of extreme cleverness-whether in art, in business, or what not. It is almost a truism that a man of genius woes not reproduce himself in his offspring: the forces of

such as that afforded by the London County Asylums can sufficient data be obtained for working out problems of this

Dr. Mott's work is, in Dr. Hollander's nature,

"LIOW white and clean this sugar is, Jean!" "Yes, Mother says she has never found any other sugar so pure or so good as

Granulated SUGAR

"She has used it ever since I can remember, and now that they are putting it up in these 2-lb. and 5-lb. Cartons, we like it better than ever. The Carton is so clean and handy, and we are always sure of getting the real Acabail. It makes the most delicious candy you ever tasted!"

Canada Sugar Refining Co., Limited, - Montreal.

