

### DOMINION ATLANTIC RAILWAY

—AND—  
**Steamship Lines**  
 —TO—  
 St. John via Digby  
 —AND—  
 Boston via Yarmouth  
 "Land of Evangeline" Route.

On and after July 1st, 1911, the Steamship and Train Service on this Railway will be as follows (Sunday excepted):  
 B. Yarmouth from Halifax 2.31 p.m.  
 Express from Halifax 12.04 p.m.  
 Express from Halifax (Sat. only) 7.40 p.m.  
 Accom. from Richmond 5.40 p.m.  
 Bluenose from Yarmouth 12.55 p.m.  
 Express from Yarmouth 1.58 p.m.  
 Express from Annapolis (Mon. only) 4.13 p.m.  
 Accom. from Annapolis 7.50 a.m.

### Midland Division

Trains of the Midland Division leave Windsor daily, (except Sunday) for Truro at 7.05 a.m., 5.10 p.m. and 6.15 a.m. and from Truro at 6.55 a.m., 2.30 p.m. and 12.09 noon connecting at Truro with trains of the Intercolonial Railway, and at Windsor with express trains to and from Halifax and Yarmouth.

### Boston S.S. Service

**BOSTON-YARMOUTH SERVICE.**  
 The Royal and United States Mail Steamships "PRINCE ARTHUR" and "PRINCE GEORGE" perform a daily service (Sunday excepted) from Yarmouth to Boston, on arrival of Bluenose and Express trains from Halifax, arriving in Boston next morning. Returning leave LONG WHARF, BOSTON, at 2.00 p. m. daily (except Saturday).

**BOSTON-DIGBY SERVICE.**  
 S. S. Boston leaves Digby for Boston on Wednesday and Saturday on arrival of Bluenose train from Halifax.

### St. JOHN and DIGBY

**ROYAL MAIL S. S. PRINCE RUPERT.**  
 Daily Service (Sunday excepted).  
 Arrives in Digby 10.45 a. m.  
 Leaves St. John 7.45 a. m.  
 Leaves Digby same day after arrival express train from Halifax.  
 Bluenose train westbound does not connect at Digby with boat for St. John.

**BASIN OF MINAS SERVICE.**  
 S. S. "Prince Albert" between Parrsboro-Kingsport-Wolfville daily, (except Sunday).

**P. GIFFINS,** Kentville, General Manager.

### FURNESS, WITBY & CO., LTD. STEAMSHIP LINERS.

London, Halifax and St. John, N. B.  
 From London. From Halifax.  
 —Kanawa July 29  
 July 28 (via St. John's, Nfld.)  
 —Rappahannock Aug. 13  
 Aug. 6 —Shenandoah Aug. 27

### LIVERPOOL, ST. JOHN'S NEWFOUNDLAND SERVICE

From Liverpool. From Halifax.  
 Steamers.  
 FOR HAVRE DIRECT  
 —Durango Aug. 2  
 Aug. 2 —Almeria Aug. 19

### FURNESS WITBY & CO., LTD. Agents, Halifax, N. S.

### H. & S. W. RAILWAY

Accom. Mon. & Fri.	Time Table in effect June 19th, 1911.	Accom. Mon. & Fri.
Read up.	Stations	Read up.
11.30	Lv. Middleton A.R.	15.50
11.58	* Clarenes	15.22
12.15	Bridgetown	15.06
12.43	* Granville Centre	14.41
12.59	Granville Ferry	14.26
13.15	* Karsdale	14.10
13.35	Ak. Port Wade Lv.	13.50

\* Flag Stations. Trains stop on signal.  
**CONNECTIONS AT MIDDLETON WITH ALL POINTS ON H. & S. W. RY. AND O. A. RY.**

**P. MOONEY** General Freight and Passenger Agent HALIFAX, N. S.

### The Cup That Cheers



and refreshes is made more certainly possible when our coffees and teas are used. They have a flavor, a body that cannot fail to appeal to coffee and tea drinkers.

**GROCERY STORE**  
 As we cater the best trade, we buy only first-class goods where quality is always conspicuous. Our stock being large and varied, if you want the best you should trade here.  
**J. E. LLOYD and SON**

### Give the New Meat Market a Call

The place where you get just what you ask for — in the old stand formerly occupied by WILLIAMS & TIBERT. A good stock always on hand.

PHONE 72 **S. H. BUCKLER,** QUEEN STREET

### Boots and Shoes



Just arrived a large stock of Mens' Heavy Grain Boots at \$2.50 - Boys' Heavy Grain Boots at \$1.80 Youths Heavy Grain Boots at \$1.60adies Tan Oxfords at \$1.80 adies Black Oxfords at \$1.80 and other lines of Boots Shoes and Rubbers at reasonable prices.

WANTED: Potatoes, Eggs and Butter in exchange for goods.

**JOSEPH I. FOSTER** GRANVILLE ST.

### ACADIA UNIVERSITY

**Horton Collegiate Academy**  
 Founded 1820 Wolfville, N. S.  
 Select boarding school for boys, preparing for University Matriculation in the Arts, Science and Engineering. Also a thorough business course, including stenography and typewriting, and a complete Manual Training Course.  
 The unsurpassed location, high standards of scholarship and conduct, wholesome moral influences, superior athletic equipment, long career and low cost, make this school famous. Enrollment last year 125. Fall term begins Sept. 6. Write for catalogue.  
 W. L. ASHLEY, B. A., Principal Wolfville, N. S.

### ACADIA UNIVERSITY

**Acadia College**  
 Founded 1828 Wolfville, N. S.  
 A time-honored institution for the education of practical young men, whose graduates achieve real success. Courses in Arts, Engineering and Theology, leading to degrees of B. A., B. Sc. and B. Th.  
 Where thorough scholarship and high character are so equally developed. Wholesome moral influences. Unsurpassed location. Fine athletic equipment. Low cost for tuition and board. Faculty of 25 specialists. Last year's enrollment 220. Fall term begins Oct. 4. Write for catalogue.  
 G. GEO. B. CUTLER, Ph. D., President Wolfville, N. S.

### ACADIA SEMINARY

**Acadia Seminary.**  
 Founded 1878 Wolfville, N. S.  
 The Free-Boarding School for Girls and Young Women in the "Land of Evangeline."  
 Every modern facility for physical, intellectual and moral culture. Comfortable buildings, with modern equipment. Careful social training. Strong faculty of 22 teachers. Last year's enrollment 225.  
 Eleven Complete Courses — Collegiate, Junior and Senior University Matriculation, Piano, Voice, Violin, Art, Oratory, Domestic Science, Business and Special Courses. Low cost. Fall term begins September 6. Write for catalogue.  
 REV. H. T. DEWOLFE, D. D., Principal Wolfville, N. S.

### September Fifth

Is the day we expect you to begin that course you need and which will repay you so handsomely. We have over a dozen unfilled places — with good salaries and not sufficient students to supply the demand. For further information write

**Maritime Business College** Halifax, N. S.  
**E. Kaulbach, C. A.** PRINCIPAL

### She Mistook Him.

W. C. Wilkinson, who for thirty-six years has been secretary of Toronto's Board of Education, prides himself on his youthful spirit and on his alertness in getting about, in spite of the fact that it was not yesterday that his hair turned grey. So, it's with an appreciation of the incident being at his expense that he tells of what happened to him in Ireland a couple of years ago.  
 Mr. Wilkinson was one of a party of about sixty on a trip through the Old Land. In a hotel at which they stayed in Killarney, the maid stayed to him one morning. "And how did your good wife sleep last night?"  
 "I don't know," was the answer.  
 "You don't know?" said the maid.  
 "My wife is about three thousand miles away," said Mr. Wilkinson.  
 The maid looked at him from head to foot and then said, "Oh, I beg your pardon. I took you for another littleould manh."

### Honesteader at 102.

That it is never too late to work has been proved by Mr. Louis Carpenter, aged 102 years, who has applied to the Saskatchewan land office for a homestead. Mr. Carpenter is strong, vigorous and active, and he is anxious to procure a pre-emption in addition — London Standard.

### Parental Assistance.

Barnes—When I was young my mother always used to sing me to sleep at night.  
 Shield—Yes; women are good at that sort of thing, but it takes the father's voice to wake a fellow up in the morning.

SEND A TRIAL ORDER TO THE **MONITOR** Job Printing Office.

### Danger From Disease Germs in Milk and Urgent Need of Inspection

The following paper on "Milk and its relation to the transmission of tuberculosis," was read before the Halifax branch of the British Medical Association by Dr. Alexander MacNeil, of Summerside.  
 Milk, its products and by-products are, as we all know, the most commonly used articles of food. It is used at every meal, chiefly in a raw state, therefore, it is very important that we should have the supply pure and healthy. It is the chief article of diet of infants, it is the food we most often give to patients when ill and when their resisting powers are lowest.

There are many impurities which may get into milk, but the one I am most interested in at present is the tubercle bacillus. Tuberculosis kills as many people, young and old, each year, as diphtheria, croup, whooping cough, scarlatina, measles and typhoid fever taken together, in other words, about fourteen per cent.  
 Now it is claimed by medical authorities that not only is there a large percentage of infant deaths due to bovine tuberculosis, but that this form of the disease is, not infrequently contracted by adults. If this be true the necessity of seeing to the purity of our milk becomes self-evident. In a matter of this kind it is not easy to err on the side of caution, for with a substance like milk that enters so largely, and in such a variety of forms, into human food, it is hardly possible to over-estimate the importance of its purity and its freedom from virulent disease germs.

**THE CAUSES OF PULMONARY CONSUMPTION.**  
 If you consult your medical text books of 1880 you will find that the causes of pulmonary consumption are put down as follows:—"Heredity, age, constitutional condition, occupation, habit, diet and digestion, interference with respiratory function, climate and locality, mental causes, previous existing diseases, and lastly, infection." The text-book I had used at that time says—"It has been imagined that consumption is capable of transmission by infection through the breath, or by eating the flesh of animals that have been subjects of phthisis, but the evidence in support of either of these modes of origin is extremely unconvincing."  
 But the discovery of Professor Koch in 1882, that the germ of consumption was due to a tiny micro-organism, has upset all these vague theories, and today the true cause of consumption is a scientific fact, as well established as any of the laws of mathematics. But this very man, Professor Koch, as eminent as authorities as he unquestionably is, affords a conspicuous example of how unsafe it is to accept without question the untested theories of any man, for, in 1896, this very scientific fact was accepted as a fallacy that bovine and human tuberculosis are not transmissible, that the disease as found in cattle was of a very different kind from the disease as it occurs in human beings, and that it was impossible for the tubercle bacillus which infects a cow to likewise infect a human being, and vice versa, and by that statement gave the public a sense of security that was no less dangerous than it was unfounded, for it is now one of the best attested facts in modern pathology that many persons, old and young, have been infected with tubercle bacilli from the milk of cows suffering from this disease.

**TO BE GUARDED AGAINST IN EVERY POSSIBLE WAY.**  
 What I want here to insist on is that tuberculosis, whether bovine, or human, is to be guarded against with all the means at our disposal, and that we should in this matter take every precaution against errors, lest, thirty years hence, we should find that we have been acting on a wrong theory as our fore-fathers had done in regard to their idea of the origin of the disease.  
 The point here to emphasize is not as to the degree of dilution in which the virulence of the tubercle bacillus will infect human beings with the disease, nor yet as to its mode of attack, whether by inhalation or by ingestion, but the fact that we are just as liable to be infected by the bovine bacilli as by the human. Indeed, some authorities go so far as to say that the milk fed to infants is the chief cause of infection, and that even all tuberculosis is of bovine origin.  
 Is tuberculosis common among cattle? In looking over the statistics of countries where the subject is receiving proper attention, we notice that the percentage of tuberculosis among cattle slaughtered in public abattoirs in different cities for different years

### THE DANGER FROM INFECTED FOOD.

In our country there being no inspection of herds, nor examination of milk, the latter, being the most dangerous especially to children, should receive our immediate attention. When we see that a great deal of our tuberculosis may be derived from the milk of diseased cows, and many authorities agree that bovine tuberculosis is more virulent than the human, who would knowingly drink milk eat butter or cheese made from the milk of tuberculous animals? I might here say that in my home town, no milk can be offered for sale without the vendor filing yearly a certificate at the town office from a competent veterinarian that the herd is free from tuberculosis.  
 According to Mohler and Washburn "After a comparison of many tubercle bacilli from different sources and a careful search of the literature, concluded that the more the subject is studied the more numerous the instances become in which bacilli of special types are found occurring naturally in animals far removed from the species which may be supposed to be their natural host. They obtain cultures of tubercle bacilli from human lesions that were morphologically and biologically bovine types, and in their summary of the investigations of others show that bovine types are frequently being obtained from man, and human types from cattle. These investigators, after a prolonged study of the susceptibility of tubercle bacilli to modification, draw the conclusion that the morphology of tubercle bacilli is their most variable characteristic." They successfully changed the morphology and also the virulence of tubercle bacilli in the course of their investigations and found it possible both to reduce and increase the virulence of tubercle bacilli for different species of animals.

**RETAINS ITS BOVINE CHARACTER.**  
 As examples of changes in morphology the following are instructive as well as interesting. A tubercle culture isolated from sputum was given a more perfect so-called "human" morphological character than it originally possessed by passing it through cattle. The same culture was given a perfect so-called "bovine" morphological character by passing it through a tuberculous boy was found to be morphologically a bovine type; after fifteen generations on artificial media it was still bovine in character; by passage through cats it became, morphologically a human type. A culture isolated from bovine tuberculosis lesions was found to be morphologically a bovine type; it became morphologically a human type by growth on solidified human blood serum. It is reasonable to assume if human blood serum can effect this change in a morphologically bovine tubercle bacillus from a bovine source, that the residence of tubercle bacilli from bovine lesions in the human body may likewise cause a change from so-called "bovine" to so-called "human" morphology."

Believing this to be true there are many avenues of infection that must be looked into. At farm houses the cat receives her saucer of milk as regularly as other members of the family receive their portion, and by passing through the cat the morphology of bovine tuberculosis is changed to that of human, we must see how often the cat is at the bottom of cases of tuberculosis, indirectly through the cow.  
**THE FOUR VENTILATION OF SOME STABLES.**  
 It is in the dairyman's interest to house his cattle in winter in warm stables so as to produce as much milk as possible. Unfortunately, many of these stables are poorly ventilated. This reduces the vitality and resistance of the cow and leaves her more susceptible if she comes in contact with infection. It is well-known that cows pass tubercle bacilli in their feces long before they show any symptoms of failing health. Consequently, it is only by veterinary inspection that we could be sure of the herds being healthy.  
 Mrs. Ward milk to the factory for butter making. The skim milk is returned home and fed to the calves and hogs. If in the process of separating the milk from the cream, the skim milk from an infected herd becomes mixed with the milk from a healthy herd, the calves from the healthy herd might become diseased.  
 Another mode of infection would be by the horn fly which is bred in feces, and knows no line fence, and which give the cattle a great deal of trouble in summer.  
 The mood of dairymen now in vogue in our country is chiefly co-operative. I have been informed by the secretary and manager of one of our largest factories that there are 1,500 cows supplying milk. In this factory for cheese making they have six vats, each vat receiving daily about 9,000 lbs. of milk. This milk is converted into cheese and the whey is returned home. The cheese is put into a curing room for thirty days, and in many cases within that time is offered for sale over the counter. I am also informed that often the cheese is marketed in England thirty days after manufacture and sold in the retail stores within that time.

### AT DEATH'S DOOR FROM KIDNEY DISEASE

**SAVED ONLY BY "FRUIT-A-TIVES"**

CLANBRASSIE, ONT.  
 "Two years ago, the doctor made forty-four calls on me, and then said he had done all he could for me. I was suffering with intense Kidney Trouble and Inflammation had set in. Two other doctors were consulted and agreed that nothing could be done to help me. On the recommendation of a neighbor, I took "Fruit-a-tives" and they cured me. To-day, I take "Fruit-a-tives" as my only medicine. I am in excellent health, and "Fruit-a-tives" is the medicine that cured me after I had been at Death's Door for months.  
 I am glad to be able to give you this testimonial. It may benefit some other woman suffering as I suffered, as I believe that I would not be alive to-day had I not used "Fruit-a-tives."  
 Mrs. P. E. WEBBER.

"Fruit-a-tives" — by its marvellous action on the kidneys — completely restores these vital organs to their normal strength and vigor — and cures every trace of Kidney Trouble. "Fruit-a-tives" is the only medicine in the world made of fruit.  
 50c. a box, 6 for \$2.50, trial size, 25c. At dealers, or from Fruit a-tives Limited, Ottawa.

tion conducted by Mohler in co-operation with Doane, tubercle bacilli have been demonstrated by guinea pig inoculations in cheese one hundred and twenty-two days old, made after the Cheddar method."

### ADHERE TO THE CREAM GLOBULES.

In regard to butter we find that though the specific gravity of the tubercle bacilli is greater than that of ordinary milk, yet the proportion of the bacilli in the top-milk is found to be greater than in any other part of the milk owing to the tenacity with which they adhere to the cream globules, so that in cream and butter they may occur in greater concentration than they do in the milk from which they are derived, yet, not only so, but it is found that no better medium for the preservation of the life and virulence of the tubercle bacilli exists than butter. Hence the necessity of seeing that the cows from which we derive our milk are free from tuberculosis. In experiments made by Schroeder and Cotton, of the Bureau Experiment station, Washington, D. C., "Butter was made from the milk of a cow affected with tubercle bacilli when two months and ten days old, he concluded that coagulated milk, fresh cheese, and salted cheese made from milk from tuberculous cows may infect men, and that the by-products fed to swine and chickens may infect these animals. In experiment, made in Switzerland to determine the fate of tubercle bacilli in cheese it was demonstrated that they died between the thirty-third and fortieth day in cheese made after the Emmentaler method, but considerably later in cheese made approximately after the Cheddar method. An emulsion of tubercle bacilli was added to milk at the same time as the rennet, and cheese was made from the milk in the manner required to obtain Cheddar cheese. From the time of manufacture average samples of the cheese were taken weekly, macerated in sterile water, and filtered. Guinea pigs were inoculated with portions of the filtrate, and it was found that the germinating power of the tubercle bacilli lasted one hundred and four days, but after one hundred and eleven days they were incapable of conveying the disease to guinea pigs by inoculation. In a recent investiga-

### THE BACILLI IN CHEESE.

J. H. Mohler, an eminent authority says: "In cheese tubercle bacilli may become mixed with the curd during the process of manufacture and they have been shown to remain virulent for over three months. As a result of Galtiers experiments conducted with cheese, both salted and not salted, which was found to contain tubercle bacilli when two months and ten days old, he concluded that coagulated milk, fresh cheese, and salted cheese made from milk from tuberculous cows may infect men, and that the by-products fed to swine and chickens may infect these animals. In experiment, made in Switzerland to determine the fate of tubercle bacilli in cheese it was demonstrated that they died between the thirty-third and fortieth day in cheese made after the Emmentaler method, but considerably later in cheese made approximately after the Cheddar method. An emulsion of tubercle bacilli was added to milk at the same time as the rennet, and cheese was made from the milk in the manner required to obtain Cheddar cheese. From the time of manufacture average samples of the cheese were taken weekly, macerated in sterile water, and filtered. Guinea pigs were inoculated with portions of the filtrate, and it was found that the germinating power of the tubercle bacilli lasted one hundred and four days, but after one hundred and eleven days they were incapable of conveying the disease to guinea pigs by inoculation. In a recent investiga-

The whey which is returned from the factory is fed to the swine, and the hog next to cattle is most frequently affected with tuberculosis. Swine tuberculosis is, without doubt as a rule, to be ascribed to feeding milk of cows suffering from tuberculosis of the udder, or dairy by-products especially the centrifugal slime of such milk.  
**HOGS INFECTED WITH TUBERCULOSIS.**  
 Inspection during last autumn showed ten per cent. of the hogs examined to be affected with tuberculosis. How many of our infants may have been  
 (Continued on page three.)

**PURITY FLOUR**

"More bread and better bread"

Makes just the kind of biscuits you like to make