

## ORIGIN OF NOTE-WORTHY INVENTIONS

### WELSH MECHANIC USED GAS FOR LIGHTING.

### Bessemer, of Steel-Making Fame—Automatic Lock Developed from a Dream.

In these days it is hard for us to realize the sensation made by the discovery of the usefulness of gas as an illuminant. That takes us back a long way, nearly to the beginning of the last century, but it serves to illustrate the incredulity with which people generally are disposed to view any departure that is wholly novel.

The originator of the idea, William Murdoch, was a poor mechanic. When, in 1796, he lighted his little home at Redruth, in Wales, with coal gas, his neighbors thought he was in league with the devil. Later on, he managed to get capital interested, and the matter came up for consideration in Parliament.

One honorable member of a parliamentary committee said to Murdoch, "Do you tell me that it will actually be possible to have a light without a wick?" And, when the inventor made an affirmative reply, he shook his head, saying, "Ah, my friend, you are trying to prove too much!"

No end of fun was made of the idea. People imagined that the gas went through the pipes on fire, and foresaw awful results. In 1809 Lady Louis Moynaux, in a letter to a friend, wrote: "They have tried a dangerous experiment in the House of Commons, which was lighted so brilliantly that one could read the smallest print with ease. A dazzling glare came from thousands of apertures in gas-pipes. Fire engines were in attendance, and hose was laid along every pipe. But they will not venture to try again."

Achievement of Berliner. Speaking of talking machines, the disc phonograph—known commercially as the gramophone—was the invention of a man who, employed in early life as a clerk, paid a mechanic fifty cents a night to teach him something about electricity. The teacher was very ignorant, and that was one reason why the pupil, Emile Berliner, was led off the beaten track. He began to make discoveries for himself, and finally evolved ideas which rendered the long distance telephone practicable. The Bell Company's monopoly is now held under the Berliner patents.

The disc phonograph came much later, and it was the prize of the writer to prepare the first article about it that ever was printed. He took it to Mr. Berliner in the manuscript for correction, and the inventor, delighted to find that it contained not a single error, gave it his indorsement for publication. Mr. Berliner is still living in Washington, and has recently been interested in the development of a "helicopter" flying machine. Most curious in its origin was the invention of a young engineer named Springer. He got his idea from a dream. For some time he had been trying to devise an automatic lock to brake wagons going down hill, so that the driver would not have to get out. He dreamed that he was driving down a steep hill, and had just such a lock on his wagon. He noticed exactly how it was constructed. On waking, he got up, sketched on a piece of paper the details of the mechanism, and went back to bed. Three days later he applied for a patent, which brought him \$25,000 the first year.

The "poor inventor" is a term proverbial. Nevertheless, many poor men have become rich through their inventions.

Invented Time Clock. Sir Henry Bessemer, who invented the steel-making process, was a poor boy who came to London from a country town to seek his fortune. Cyrus McCormick, who created the reaper and self-binding harvester, died worth \$20,000,000. W. L. Buldy was a watchmaker. He invented the time clock which keeps tab on employees in factories and places of business, and it made him rich.

Charles M. Hall was a student at Oberlin College when he discovered a means whereby aluminum could be cheaply separated from its ores. The method was simple enough, but it brought him wealth and made the white metal available for the housewife's pots and pans. Mergenthaler was an expert mechanic. His mechanical typesetter netted him millions. W. W. Jenne and C. L. Sholes, who did most to develop the typewriter (though their names are known to few), were both enriched thereby. The same is true of Chaffee J. Van Depoele who invented the under-running trolley which drives street cars in cities. He was a cabinet-maker in Detroit, and took up the study of electricity for evening amusement.

L. C. Crowell, inventor of the newspaper folder, was a mechanic. His idea was well worth the fortune it gained for him. Lack of a folding device had set a limit on the output of the press. But the folder takes newspaper sheets as they receive the impressions folds them, packs them in neat shape, and stacks them all ready for distribution.

Twice as much power is required to stop a train as to start it.

## A MOTHER'S DUTY TO HER DAUGHTER

### Health Must be Guarded as She Comes to Womanhood.

Every mother who calls to mind her own girlhood knows how urgently her daughter is likely to need health and strength during the years between early school days and womanhood. It is then that growing girls droop and become bloodless and nervous. Nature is calling for more nourishment than the blood can supply, and signs of distress are plainly evident in dull eyes, pallid cheeks, weak and aching backs and a dislike for proper food. These signs mean that the blood is weak and watery. The watchful mother takes prompt steps to give the new, rich blood her system calls for by giving her Dr. Williams' Pink Pills. No other medicine has ever succeeded like them and thousands of mothers have proved their worth. Mrs. W. H. McIntyre, Gananoque, Ont., tells what these pills have done for both herself and her daughter. She says:—"I have used Dr. Williams' Pink Pills for many years, especially in times of weakness and general debility, and have found them a most satisfactory medicine. After a severe attack of influenza I found myself in a nervous condition and resorted to my old tonic—Pink Pills—and they did not fail me. I also gave them to my eldest daughter, who was in a serious condition due to ailments of girls of her age. She complained of headaches and backaches, and would often grow hysterical. She began taking the pills and was soon on the road to health again. She never complains now of headaches or backaches, and I give the credit to Dr. Williams' Pink Pills. Whenever, I see any of my children ailing or in need of a blood tonic, I give them these pills and always with the best results."

You can get these pills through any dealer in medicine or by mail at 50 cents a box or six boxes for \$2.50 from The Dr. Williams' Medicine Co., Brockville, Ont.

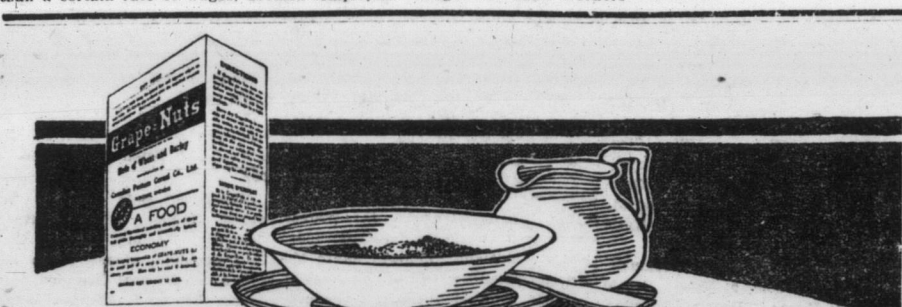
## Minimum Wage Legislation

By Elizabeth P. MacCallum, M.A., Social Service Council of Canada

Alberta is now the seventh province of the Dominion that has committed itself to a policy of governmental regulation of wages for women. In British Columbia, Saskatchewan, Manitoba, and Ontario government legislation is well under way; in Alberta, Quebec and Nova Scotia the requisite legislation has been enacted, but the acts are not yet in force. Alberta has not yet had time to take action; but Nova Scotia and Quebec have had the legislation on their statute books for three years. Action will probably be all the more effective for the delay, for these two provinces will soon have a wealth of experience in other parts of the Dominion to guide them, when they do begin to enforce their Minimum Wage Acts.

There is a general conviction throughout Canada that some governmental action should be taken to protect workingwomen from each other and from exploitation by cheap employers. That is to say, there is a large percentage of our workingwomen who are entirely dependent upon their own earnings, and it is felt that the right of these women to a living wage should be upheld in the face of the fact that many semi-dependent women are naturally willing to work for less than a living wage. Minimum wage laws in Canada, then, have been passed largely with the aim in view of making it illegal for an employer to pay or a female worker to accept less than a certain rate of wages, deemed

by the Wages Board to approximate to a fair standard of living. In Great Britain minimum wage legislation applies to men as well as women, but in Canada, whether wisely or not, little has been said about protecting that fluctuating, vague and inarticulate body of men workers who are fortunately smaller here than in many other countries. In all countries where minimum wage legislation has been enacted, the ultimate aim of the legislators is to create decent standards of living where they do not exist, and thus give to all classes of workers a sense of self-respect which will in time engender enough independence of spirit to enable them to look after themselves. That self-respect is conspicuously lacking among those workers whose standards are still of the lowest order. It is found that many such workers do not appear to care whether their wages are raised or not. Their indifference is born of physical under-nourishment, and applies to almost all phases of their existence. It is to the advantage of the workers, of the province, and of individual employers as well, that apathy of this kind be done away with. British Columbia has had the longest experience of any Canadian province in the field of minimum wage legislation. Industries have been dealt with one by one, until wages have been regulated in almost every industry in which women are largely employed. Wages for adult workers



It's a fine thing to keep out of trouble—

but it's a finer thing to know how to get out of trouble after you have gotten into it.

Many people thoughtlessly get into trouble by loading up with heavy, indigestible foods which fail to supply the essential elements for repairing the daily wear on their nerves and body tissues.

It is well to know that Grape-Nuts with good rich milk is a highly nourishing food, providing all the necessary nutritive and mineral elements in proper form for

ready assimilation by the system. When you take Grape-Nuts a substantial part of your regular daily diet, Nature will quickly assert herself and build healthy nerve cells and sound body tissues.

Crisp and crunchy Grape-Nuts, made from wheat and malted barley, is a satisfying food for breakfast—a welcome answer to the call of appetite.

The familiar Yellow package contains more nourishment in less bulk than any other cereal food.

"There's a Reason" for Grape-Nuts —THE BODY BUILDER

Canadian Postum Cereal Co., Ltd., 45 Front St., E., Toronto. Factory: Windsor, Ontario

### The Bold Heart.

This time I did not win,  
And shall I then  
Go with bowed head  
And never try again?

No, rather let me strive  
The harder still  
Until I bend my fortune  
To my will.

Let me not break nor bend  
But let me be  
Stronger than any fate  
That comes to me.

Let me be bold of heart  
And learn to read  
In every failure  
How I may succeed.

—Abigail Cresson.

### His Lucid Moment.

A doctor had been called to see a man who was very ill. He examined him and said to the nurse: "You must watch the case very closely through the night, and tell me all the symptoms when I come back in the morning."

The man became worse during the night and talked a lot of nonsense in his fever.

When the doctor returned in the morning, he said to the nurse: "Tell me exactly what happened after I left."

"You were hardly out of the room," she began, "when he said: 'When did that old fool say he was coming back? Those were the last sensible words he spoke.'"

### Muhrah!

Young Alderman—"Just imagine, those rascally street railway people had the nerve to offer me a hundred thousand to vote for their measure."

His wife—"Oh, Henry! I always knew you'd make good."

You get cheerfulness out of life in proportion as you put cheerfulness in. You cannot invest counterfeit coin and expect dividends in real money.

### Geography in Names.

Many things we use every day are named after the towns from which they originally came.

For instance, probably you have a pair of worsted socks, which were once made at Worstead, but which nowadays come principally from Huddersfield; or a Panama hat, which comes from Ecuador instead of the place from which it took its name. Cambric handkerchiefs are so-called from the town of Cambrai, in France.

Twined suits, Inverness capes, and Leghorn hats are examples of the same thing. The connection between damsons and Damascus is not so obvious, but damson is really only a contraction for "Damascene plum." Currants get their name from the fact that originally they were made from small grapes, which still grow near Corinth, in Greece; they were formerly called Corinthians.

Cherries came from the city of Cerasus, which once stood in Asia Minor, while chestnuts preserve the name of Castana, another city of the past, whence the trees first came to Europe.

The names of two cheeses, Cheddar and Stilton, come from two villages, one in Somerset and the other in Huntingdonshire. Worcester, Dresden, and Severs have all given names to different kinds of china, and Delft, a small Dutch town, is remembered by Delft pottery.

## A GOOD MEDICINE FOR THE BABY

Nothing can equal Baby's Own Tablets as a medicine for little ones. They are a laxative, mild but thorough in action, and never fail to relieve constipation, colic, colds and simple fevers. Once a mother has used them she will use nothing else. Concerning Mrs. Saluste Pelletier, St. Damas des Aulaines, Que., writes:—"I always keep a box of Baby's Own Tablets in the house. They are the best medicine I know of for little ones and I would not be without them." The tablets are sold by medicine dealers or by mail at 25c a box from The Dr. Williams' Medicine Co., Brockville, Ont.

### Awaiting Her Tricks.

Bobby—"Are you the trained nurse mamma said was coming?"

The Nurse—"Yes, dear, I'm the trained nurse."

Bobby—"Let's see some of your tricks."

"No one is living afloat unless he so lives that whoever meets him goes away more confident and joyous for the contact."

vary from \$12.75 to \$15.50 per week, representing often an increase of about 35 per cent. Hours have been shortened, so that forty-eight is regarded as a normal week. British Columbia's experience tends to refute the opinion held by many that a minimum wage is apt to become the maximum and so defeat its own purpose. In 1920 average wages in different industries were found to exceed the minimum by as much as \$3.19, \$1.58, \$2.64, \$2.58, and \$4.43 per week. In Saskatchewan almost half of the laundry workers are receiving more than the minimum, and about two-thirds of the workers in shops and stores are in a similar position.

The Wage Boards of Manitoba and Ontario have made a large number of awards, and are experimenting in differential wages for various localities according to size. Their awards are not generally as high as those in Saskatchewan and British Columbia, but by the use of the informal conference with employers and employees, they are making a valuable addition to the world's experience in minimum wage regulation.

## Has Never Felt Better In All Her Life

Thousands of frail, nervous, peopled and convalescents everywhere have testified to the remarkable power of Tanlac in bringing back their health, strength, and working efficiency. It seems to quickly invigorate the constitution and is a powerful foe of weakness. Mrs. Emma Miles, 125 Tecumseh Ave., London, Ont., says:

"I suffered terribly from stomach trouble, headaches and dizzy attacks, and was so weak, nervous and run down it was all I could do to get about. Since I've taken Tanlac, my stomach is in splendid order, the headaches and other troubles have left me and I'm simply feeling fine."

There is not a single portion of the body that is not benefited by the helpful action of Tanlac. It enables the stomach to turn the food into healthy blood, bone and muscle, purifies the system and builds you back to normal weight. Get a bottle to-day at any good druggist.

### Our Work is Born With Us.

"No man is born into this world," says Lowell, "whose work is not born with him."

Instill this idea into the very marrow of the child's being—that no one is born into the world whose work is not born with him. Look out for your boy and girl. Their work is indicated in their blood, in the very make-up of their constitution. Teach them this from the start. Impress upon their young minds the fact that their tendencies, their aptitudes, are indications of the thing that they are especially fitted to do; that they were sent here on some definite mission by the Creator of the universe, and that they will never be really happy or successful until they are doing that for which God planned them.

Round pegs in square holes are never contented, never happy, never satisfied. A large percentage of our criminal class comes from these discontented, misplaced human beings. There is no greater service parents can do their children, or teachers their pupils than help them find their work—their true place in life. There is no more pitiable person in the world than the misfit, the one who has not found his work.—O. S. Marden.

## "Cascarets" 10c

For Sluggish Liver or Constipated Bowels

Clean your bowels! Feel fine! When you feel sick, dizzy, upset, when your head is dull or aching, or your stomach is sour or gassy, just take one or two Cascarets to relieve constipation. No gripping—nicest laxative-cathartic on earth for grown-ups and children. 10c a box. Taste like candy.

Her Specialty. "Malachi," asked Mr. Casey, "can your wife cook as well as your mother did?" "She cannot," replied Malachi, "but my friend, I never mention it, for she can throw considerably better."

MONEY ORDERS. Sent a Dominion Express Money Order. Five Dollars costs three cents.

Avoid the pleasure that holds the penalty of future pain.

Ask for Minda's and take no other.

A Vision of the Era of Love. Julia Ward Howe, who devoted her life to the service of humanity had a wonderful vision before she passed to the beyond. The story of it is here given in her own words.

One night recently I experienced a sudden awakening. I had a vision of a new era which is to dawn for mankind and in which men and women are battling equally, unitedly, for the uplifting and emancipation of the race from evil.

"I saw men and women of every clime working like bees to unwrap the evils of society and to discover the whole web of vice and misery, and to apply the remedies and also to find the influences that should best counteract evil and its attendant suffering. "There seemed to be a new, a wondrous, ever-permeating light, the glory of which I cannot attempt to put in human words—the light of new-born hope and sympathy blinding. The source of this light was human endeavor—immortal purpose of countless thousands of men and women, who were equally doing their part in the world.

"I saw the men and the women, standing side by side, shoulder to shoulder, in a common and indomitable purpose lighting every face with a glory not of this earth. All were advancing with one end in view, one foe to trample, one everlasting good to gain.

"And then I saw the victory. All of evil was gone from the earth. Misery was blotted out. Mankind was emancipated and ready to march forward in a new era of human understanding, all-encompassing sympathy and ever-present help. The era of perfect love of peace passing all understanding."

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## PUT STOMACH IN ORDER AT ONCE

"Pape's Diapepsin" for Gas, Indigestion or Sour Stomach

Instantly! Stomach corrected! You never feel the slightest distress from indigestion or a sour, acid, gassy stomach, after you eat a tablet of "Pape's Diapepsin." The moment it reaches the stomach all sourness, flatulence, heart-burn, gases, palpitation and pain disappear. Druggists guarantee each package to correct digestion at once. End your stomach trouble for few cents.

### When Moonlight Falls.

When moonlight falls on the water, It is like fingers touching the chords of a harp

On a misty day. When moonlight strikes the water I cannot get it into my poem— I only hear the water's fingers and the moon's rays

Intertwined.

I think of all the words I love to hear And try to find words white enough For such shining.

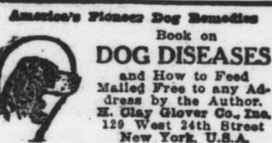
—Hilda Conkling.

St. Paul's Cathedral is the fifth largest church in the world.



Fishermen and Campers, Quick Relief. PUT A BOTTLE IN YOUR OUTFIT

COARSE SALT LAND SALT Bulk Carlots TORONTO SALT WORKS C. J. CLIFF TORONTO



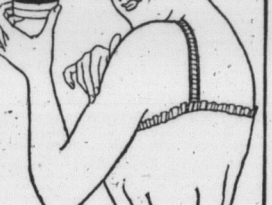
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And How to Feed

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Cuticura Quickly Soothes Rashes and Irritations

Hot baths with Cuticura Soap, followed by light applications of Cuticura Ointment, afford immediate relief in most cases of rashes, irritations, eczemas, etc. Cuticura Talcum is also excellent for the skin.

Soap 25c, Ointment 25c and 50c, Talcum 25c. Sold throughout the Dominion. Canadian Depot: Lyons, Limited, 344 St. Paul St., W., Montreal.

Cuticura Soap shaves without mug.

### Classified Advertisements

PUPIL NURSES WANTED—3-YEAR course; accredited school; monthly allowance; first-class training in surgical, medical and obstetrical work; full course of lectures. Apply Superintendent, West End Hospital, 35 S. Hoyne Ave., Chicago, Ill., U.S.A.

REIDOUT & MATTHEW, KENT BLDG., Yonge Street, Toronto, Registered Patent Attorneys. Send for free booklet.

### BELTING FOR SALE

THRESHER BELTS AND SUBSTITUTION hose, new and used, shipped subject to approval at lowest prices in Canada. York Belting Co., 111 York St., Toronto, Ont.

Cascara bark used for medicinal purposes is an important product of the Oregon forests.

Minard's Liniment for Distemper. The weight of the Great Pyramid of Egypt has been estimated at 6,000,000 tons.

## MOTHER!

Your Child's Bowels Need "California Fig Syrup"



Hurry mother! Even a sick child loves the "fruity" taste of "California Fig Syrup" and it never fails to open the bowels. A teaspoonful to-day may prevent a sick child to-morrow. If constipated, bilious, feverish, fretful, has cold, colic, or if stomach is sour, tongue coated, breath bad, remember a good cleansing of the little bowels is often all that is necessary.

Ask your druggist for genuine "California Fig Syrup" which has directions for babies and children of all ages printed on bottle. Mother! You must say "California" or you may get an imitation fig syrup.

## FOLLOWED MOTHER'S ADVICE

Took Lydia E. Pinkham's Vegetable Compound—Now Enjoys Good Health

Kessock, Saskatchewan—"My mother has taken Lydia E. Pinkham's vegetable Compound and upon learning of my troubles advised me to try it, as I seemed all run down after the flu, and had some troubles such as women are apt to have. I have taken Lydia E. Pinkham's Vegetable Compound and Lydia E. Pinkham's Blood Medicine and used the Sanative Wash. Also Dr. Brown's Capsules and Prescription and am so much better in every way. I am willing for you to use my letter as a testimonial as I recommend your medicines."

—Mrs. IRENE NELSON, Kessock, Saskatchewan.

When backaches and headaches drive out all ambition, when that bearing-down sensation attacks you, when you are nervous and blue, the one great help for such ailments is Lydia E. Pinkham's Vegetable Compound.

# ASPIRIN

UNLESS you see the name "Bayer" on tablets, you are not getting Aspirin at all



Accept only an "unbroken package" of "Bayer Tablets of Aspirin," which contains directions and dose worked out by physicians during 22 years and proved safe by millions for

Colds Headache Rheumatism  
Toothache Neuralgia Neuritis  
Earache Lumbago Pain, Pain

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