

**When the Sap Flows.**  
Of the many upward movements in the sap, few are so mysterious and so little comprehended as that of the sap, forcing its way through the tiny rootlets to the top of the tallest trees. Why does it rise with no known power compelling it against the well known natural powers of gravity, the resistance of friction and so on? A master mind must answer this question, but meanwhile we may offer a few suggestions.

"Capillary attraction" is the physical term most commonly employed to account for this natural phenomenon, but it does not answer several questions which might occur to an inquiring and intelligent mind. The original impulse undoubtedly comes from the rootlets of the trees through whose trunks and branches the sap ascends. The rootlets absorb from the earth moisture, much as blotting paper absorbs ink. The extremities of the branches give off their fluids by evaporation and the sap, relieved of this pressure, flows upward into them. With the sap in the branches are introduced small bubbles. Thus is made what the physicist knows as a "Jamin channel" of bubbles and water. When the air currents move the trees, the little tubes, bearing the water and air, are flattened, and their contents are driven out—upward and downward. As the tree regains its upward position, the tubes fill from below, and the upward flow of the sap is resumed. For reasons which may occur to everybody, this may seem a lame explanation, though it appears to be a valid one, as far as it goes; and it lends an added significance to the incessant movement of the trees, which, perhaps, is thus serving a definite purpose.—Review of Reviews.

#### Great Fortress at Mercy of Elements.

The Rocky Island, Heligoland, which as a fortress kept vigil over the western entrance to the Kiel Canal and played an important role as a submarine and flying base during the World War, is disintegrating rapidly under the constant explosions of dynamite, which for three years have been demolishing the great fortifications the Germans had erected in the island. German scientists assert that the great crag of red and white sandstone is being so badly damaged by the concussion that its complete annihilation by the rough waters and strong winds of the North Sea may come within a few years if protective measures are not taken. The island rises a hundred feet above the sea, but is less than a mile long and scarcely a quarter of a mile wide at its broadest part. Great sections of the cliffs already have slipped into the sea since the demolition of the fortifications began under the direction of the British and French. The Germans built a powerful sea wall and spent much money in protecting the island against the ravages of the sea when it was a fortress; but under the Versailles Treaty terms cannot again be fortified, the shattered island, which has a population of 3,000 fishermen, probably will be left to the mercy of the elements.

**A Quick-Thinking Preacher.**  
What a valuable gift is a ready wit! It so often makes the difference between humiliation and triumph. An interesting example of its usefulness in a tight place is given by a contributor to the Atlantic Monthly. She writes:

One day an Indian native preacher whom I delight to think of was trying to preach to a crowd of Mohammedan villagers. An old hostile mulvi stepped up and said: "If you think you are able to instruct us, tell me this: God made the world, didn't he? Well, what did He do with the pieces that were left? You know there must have been some scraps." Without hesitating, the preacher stretched out his arm, pointing directly in front of him. The crowd turned to look. "There are the pieces," he cried dramatically, indicating the horizon of the Himalayas, which shone in their snows dazzlingly after a winter rain. The crowd looked, and fell silent. "That's so!" conceded the awe-struck mulvi. And they heard him reverently to the end, no longer doubting his wisdom.

#### Slow Moving, but He Budgeted at Last.

A Youngstown, Ohio, man, says the Telegram of that city, recently applied for settlement of a claim for fire insurance and in response to the agent's queries explained that it was a door that was burned, and that the damages amounted as near as he could estimate to about five dollars. "When did the fire happen?" asked the agent, and after a moment's hesitation the answer came: "About thirty years ago." "What? Thirty years ago, and you have waited all these years to report it?" "Yes, sir," said the Youngstown man, "the women-folks at my house have never given me a moment's peace since that darn door was burned, and I just couldn't stand it any longer."

In Memoriam.  
First Bachelor—"Why weren't you at your chum's wedding this morning?" Second Bachelor—"I prefer to remember him as he was in life."

The birth-rate for England and Wales for the year 1922 was the lowest on record, save for the war years, 1915 to 1919.

# SMOKE OLD CHUM

The Tobacco of Quality  
**1/2 LB. TINS**  
and in packages

#### Surnames and Their Origin

**ARUNDEL**  
Racial Origin—English.  
Source—A locality.  
It is a matter of fact that the number of English family names in the classification of those which have been derived from the names of places is limited only by the number of place names which existed in England through the period of family name formation.

The name of virtually every city, town and hamlet at this period was likely to be taken not by one but by many individuals who moved away from it to some other place. Or rather, it was likely to have been conferred upon them by their new neighbors, for family names were more often a natural growth than the result of deliberate adoption, and a family's neighbors had more to say about the most

convenient designation than the members of the family itself.

**HARTWELL**  
Racial Origin—English.  
Source—A place name.  
Hartwell is one of those family names which have been taken from place names. Family names, of course, were seldom formed by arbitrary adoption. They were the result of growth of descriptive surnames conferred upon an individual in an age when populations had become so large that there were not enough names to go around, and it was necessary to distinguish between two men of the same name. A most natural method was to refer to the place from which a man had come.


Hartwell was a village in Buckinghamshire. Its name meant "the well of the deer."  
**Intensive Farming.**  
"How are you making out with that abandoned farm you bought?"  
"Fine! I sold the quarry rights to one crowd, and rented the surface to another as a golf course. Now if I can lease the air to some wireless company I'll have about everything under cultivation. Who says intensive farming doesn't pay?"

East or West  
Eddy's Best

## EDDY'S MATCHES

Insist on having  
EDDY'S!

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**Dobson's New Life Remedy**

Is a positive Remedy for Acute, Chronic and Muscular Rheumatism in all its various forms. COUNTLESS GRATEFUL TESTIMONIALS and Repeat Orders received during past 25 years.

DOBSON'S NEW LIFE REMEDY is not an experiment but the product of a quarter century of study and research. Pleasant to take. Does not upset the stomach. No harmful drugs.

**DO NOT BE PREJUDICED.** Dobson's New Life Remedy will give you a new lease on life by freeing you of pain. Thousands of enthusiastic customers have written us stating that after years of failure with other medicines, electric belts, etc., they were cured by Dobson's New Life Remedy.

One bottle for One Dollar. Six bottles for Five Dollars.

**Dobson's New Life Remedy Company**  
70 West Adelaide St., Toronto, Canada



She—"How long ought it to take you to teach me to skate?"  
He—"I should say about all winter, but I can teach a homely girl in half an hour."

**France's Sherlock Holmes.**  
The best-known detective in France at the present time is Edmond Bayle, a chemist whose laboratory is in the Palais de Justice in Paris. He is chief of the technical bureau of the Paris police department, and he has met with such success that the more mediocre criminals look upon him as a dabbler in magic.

Dr. Bayle does not work on the British Sherlock Holmes lines. He pays no attention to the personality or psychology of the criminal, but confines himself to material things. His workshop is equipped in accordance with this, and the numerous pieces of apparatus are designed for special purposes, such as examining forged money, the detection of bloodstains, and, in fact, the analysis of anything and everything that is picked up by those on the trail of a criminal.

In his records are registered the names of over eight million persons who have ever been involved in crime of any sort, and full particulars of any one of them can be produced at a moment's notice.

This extraordinary man has a theory that there is no crime that cannot be detected, and that every criminal, however clever, leaves traces behind him.

#### A GOOD MEDICINE FOR THE SPRINGTIME

**Do Not Use Harsh Purgatives—A Tonic is All You Need.**

Not sick—but not feeling quite well. That is the way most people feel in the spring. Easily tired, appetite flake, sometimes headaches and a feeling of depression. Pimples or eruptions may appear on the skin, or there may be twinges of rheumatism or neuralgia. Any of these indicate that the blood is out of order—that the indoor life of winter has left its mark upon you and may easily develop into more serious trouble.

Do not dose yourself with purgatives, as many people do, in the hope that you can put your blood right. Purgatives gallop through the system and weaken instead of giving strength. Any doctor will tell you this is true. What you need in the spring is a tonic that will enrich the blood and build up the nerves. Dr. Williams' Pink Pills do this speedily and surely. Every dose of this medicine helps to enrich the blood, which clears the skin, strengthens the appetite and makes tired, depressed men, women and children active and strong. Miss S. L. McEchtrou, Nairn, N.B., writes: "I have been in the habit of taking Dr. Williams' Pink Pills in the spring and they keep me in the best of health. I think it is entirely due to the use of these pills that I always have such good health."

Sold by all medicine dealers or by mail at 50¢ a box from The Dr. Williams' Medicine Co., Brockville, Ont.

#### Bread 2,500 Years Old.

It seems impossible that bread could survive for nearly 2,500 years, and yet that is the age of a loaf dug up not long ago. The discovery was made by a French explorer in Syria, and he estimated that the loaf was baked in the year 500 B.C. In the shape of a bun, it was in excellent condition and was wrapped in a cloth in a tightly-sealed tomb. Other ancient loaves have been found at Pompeii, in Italy. Unearthed in a well-preserved oven, they were slightly charred, but the baker's name was read quite easily.

Not so old as these, but still getting on in years, is a loaf which is preserved at Ambaston, in Derbyshire. It is over 700 years old, and was originally given to the Soar family with a grant of land made to them by King John.

**MONEY ORDERS.**  
Send a Dominion Express Money Order. Five Dollars costs three cents. Economy.  
Wife—"John, since you say we must economize, I have decided not to get Josephine a new hat this winter, but to let her have mine."  
Hub—"And you?"  
Wife—"Oh, I must have a new one, of course."

**The Disturbing Element.**  
Maloney, Jr.—"What's an 'amicable settlement,' Pa?"  
Maloney, Sr.—"A town where there's no Irish. Or suppose, sonny."

Minard's Liniment for sale everywhere

#### Achievement.

Two travelers halted on a mountain trail. Blocked by great pyramidal crags of snow. "Beyond this point," said one, "no man can go!" He who would climb those frowning towers must fall! He would be flogged and frozen by the gale; Lightning would scorch him, polar winds would blow; Bleeding beneath the cliffs he could not scale!"

But while one wanderer thus invoked despair, The other dug his spikes deep in the soil, And inch on inch, by steady, straining toil, He mounted that precarious, rock-strewn stair. Hearing his fellow wall, "You are too weak!" He stood, triumphant, on a starry peak! Stanton A. Coblenz.

#### CHILDHOOD INDIGESTION

Nothing is more common in childhood than indigestion. Nothing is more dangerous to proper growth, more weakening to the constitution or more likely to pave the way to dangerous disease. Fully nine-tenths of all the minor ills of childhood have their root in indigestion. There is no medicine for little ones to equal Baby's Own Tablets in relieving this trouble. They have proved of benefit in thousands of homes. Concerning them Mrs. Jos. Lunette, Immaculate Conception, Que., writes: "My baby was a great sufferer from indigestion, but the Tablets soon set her right and now I would not be without them." Baby's Own Tablets are sold by medicine dealers or by mail at 25 cents a box from The Dr. Williams' Medicine Co., Brockville, Ont.

#### Population of Palestine.

Palestine has a total population of 757,182, according to the figures of the census of three months ago. Ten per cent. of the people in Palestine are given as Christian, 11 per cent. as Jews and 79 per cent. as Mohammedans. The figures for Christians and Jews are regarded as about correct, but there was such strong opposition to the census on the part of the Mohammedans that their number probably is considerably under-estimated.

In two cities only is there a preponderant Jewish population, Jerusalem and Tiberias. In former, out of a total of 62,000, 34,000 are descended from Abraham and the balance are about equally divided between the followers of Jesus and the prophet of Mecca. It is interesting to note that Bethlehem is the only town in the land in which Christians predominate. Here there are 5,838 of this faith, 313 Mohammedans and two Jews. Nazareth has a population of 7,424 of which roughly two-thirds are Christian, one-third Moslem, and only 53 Jews. The principal seaport, Jaffa, has about 47,000 people, of whom there are 20,000 each of Jews and Mohammedans, and about 7,000 Christians. The other large centres of population are very largely Mohammedan.

The Palestine Weekly, a Zionist organ, claims that according to Roman records this country has supported a population of 7,000,000, but when one considers that the area of Palestine is about equal to that of Vermont and that it has about an equal amount of arable land, one questions seriously whether, with the highest development of her natural resources, it will be possible for Palestine ever to support a greatly augmented population. Vermont, in 1920, counted 352,428 people within the state.

Britain can speak by telephone to France, Belgium, Switzerland, and Holland. In America the range of the long-distance phone is over 4,000 miles.



#### Stops Backaches at once—so comforting

A tiring day on your feet. Stopping, lifting, running up and downstairs—does your back feel tired and painful knots? Apply Sloan's to those sore, tired muscles. That warm, penetrating glow brings immediate comfort. Almost before you realize it the pain and stiffness are gone. Wherever congestion causes pain—use Sloan's. Sloan's is protection against pain. All druggists carry it.

**Sloan's Liniment—kills pain!**  
For rheumatism, bruises, sprains, chest colds

ISSUE No. 16—23

#### LOST 30 POUNDS THEN GAINED 35

#### Veteran Real Estate Broker of Toronto Tells of Remarkable Restoration by Tanlac.

James Burns, 20 St. Albans Street, is still another man of prominence in Toronto to speak out in behalf of Tanlac. Mr. Burns is now seventy-three years of age, but says: "No one takes me for seventy-three now, and I feel every bit as active as I did forty years ago." "Before taking Tanlac my weight fell off from one hundred and sixty to one hundred and thirty pounds, and I had begun to feel the hand of 'Old Father Time' laying heavily on me. I seldom ate more than one meal a day and that caused me hours of misery. Nights I would pace the floor too nervous to sleep, and many days I felt too worn-out to dress and go out anywhere." "I don't believe I could have ever pulled up to where I am now if it hadn't been for Tanlac. It has restored my health completely and built me up to one hundred and sixty-five pounds. Tanlac is the best investment I ever made."

Tanlac is for sale by all good druggists. Over 35 million bottles sold.

British boys will be sent across to Australia at the rate of 500 a month if a scheme of emigration, recently launched by the Australian Government proves successful.

Minard's Liniment used by Physicians.

The New Testament was divided into verses by Robert Stevens, a printer, in 1651.

America's Pioneer Dog Remedies

### DOG DISEASES

Book on  
How to Feed  
Mailed Free to any Address by the Author,  
H. Clay Glover Co., Inc.,  
125 West 24th Street,  
New York, U.S.A.

Keep Stomach and Bowels Right

By giving baby the harmless, purely vegetable, infant and children's remedy,  
**MRS. WINSLOW'S SYRUP**  
brings astonishing, gratifying results in making baby's stomach digest food and bowels move as they should at teething time. Guaranteed free from narcotics, opiates, alcohol and all harmful ingredients. Safe and satisfactory.

At All Druggists

#### Cuticura Heals Face Disfigured With Itchy Eczema

"Eczema broke out in watery pimples on my face and head. Later my cheeks and head became so bad that they were covered with large scales. The itching and burning were so severe that I could not sleep at night. My face was badly disfigured. My hair became dry and lifeless and fell out so that I had to have it cut off close to my scalp." "A friend advised me to try Cuticura Soap and Ointment so I purchased some, and after using two cakes of Cuticura Soap and two boxes of Cuticura Ointment I was healed." (Signed) Mrs. Elmer King, Box 278, Jackson St., Oxford, Nova Scotia.

Make Cuticura Soap, Ointment and Talcum your daily toilet preparations.

Sample Each Free by Mail. Address: "Farnam, Limited, 146 St. Paul St., W., Montreal." Sold everywhere. Soap, Ointment and Talcum. Cuticura Soap shaves without lather.

#### Classified Advertisements.

#### FREE.

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#### REPAIRS AND SUPPLIES.

**CHATHAM PANNING MILL.**  
Chatham Inc.—Paints, Thermometers, Sundry Mason Campbell, Chatham, Ont.

#### LABORERS WANTED—TO DO PLAIN

and light sewing at home, whole or spare time; good pay; work sent any distance; charges paid. Send stamp for particulars. National Manufacturing Co., Montreal.

Travelling by air from London to New York in twelve hours is prophesied by Major-General Sir W. S. Brancker, Director of Civil Aviation.

Enliven Your Eyes through the daily use of



## MURINE

for your EYES

#### For the Kidneys

Kidney troubles are frequently caused by badly digested food which overtaxes these organs to eliminate their irritant acids. Help your stomach to properly digest the food by taking 15 to 30 drops of Extract of Roots, sold as Nether Seal's Curative Syrup, and your kidney disorder will promptly disappear. Get the genuine, 50¢ and \$1.00 bottles.

#### HEADACHE?

Bathe the forehead with Minard's and inhale freely. It gives quick relief for every ache.

## MINARD'S

"KING OF PAIN"

## LINIMENT

#### THEY TELL THEIR NEIGHBORS

Women Tell Each Other How They Were Helped by Lydia E. Pinkham's Vegetable Compound

Woodbridge, Ont.—"I took Lydia E. Pinkham's Vegetable Compound for female troubles. I would have headaches, backaches, pains between my shoulders and under my shoulder-blades and dragging down feelings on each side. I was sometimes unable to do my work and felt very badly. My mother-in-law told me about the Vegetable Compound and I got some right away. It has done me more good than any other medicine I ever took and I recommend it to my neighbors. You are quite welcome to use this letter as a testimonial if you think it will help some poor sufferer."—Mrs. EDGAR SIMMONS, R. 2, Woodbridge, Ont.

In nearly every neighborhood in every town and city in this country there are women who have been helped by Lydia E. Pinkham's Vegetable Compound in the treatment of ailments peculiar to their sex, and they take pleasure in passing the good word along to other women. Therefore, if you are troubled in this way, why not give Lydia E. Pinkham's Vegetable Compound a fair trial.

This famous remedy, the medicinal ingredients of which are derived from roots and herbs, has for forty years proved its value in such cases. Women everywhere bear willing testimony to the wonderful virtue of 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

Handy "Bayer" boxes of 12 tablets—Also bottles of 24 and 100—Druggists. Aspirin is the trade mark (registered in Canada) of Bayer Manufacture of Monocarbolic acid of Salicylic acid. While it is well known that Aspirin means Bayer manufacture, to enable the public against imitations, the Tablets of Bayer Company will be stamped with their general trade mark, the "Bayer Cross."