

## THE AWAKENING

By William J. McNulty.

In days of yore, there lived upon the banks of the winding St. Croix River, two men of the woods. In the summer they guided for salmon and trout fishing parties. In the fall, they guided for hunting parties. And in the winter they trapped the fur-bearing animals.

The cabins of Dave Carney and Sandy Leonard were separated by two miles of densely wooded forest. And for a radius of twenty miles, the forest extended. It was one of the most valuable stretches of timber and pulpwood lands that one could visualize. Dave and Sandy exercised squatters' rights in settling on the land. They had cleared away sufficient of the forest to allow for the building of the cabins and the starting of gardens. Although the St. Croix Lumber Company, which owned the land, in entirety, could have evicted both Carney and Leonard, at any time, the company, realizing the right of any man to earn his livelihood, allowed both to continue living on the company's holdings.

Came the day when forest conservation developed into a topic of vital import. Forest fires had devastated timber lands in other sections and alarm was expressed for the limits along the St. Croix. Hitherto, little attention had been paid to fire preventive measures along the old St. Croix. But the disastrous fires elsewhere had awakened the executive of the St. Croix Lumber Company to the necessity of fire protection. As a part of the campaign that was organized, the two woodsmen were called to the woodlands office of the company at Milltown. There, Charlie Dickson, the woodlands manager, impressed on both the need of exercising every precaution to prevent fires. Carney and Leonard agreed to work hand in hand with the new policy of the company and returned to their abodes in the woods.

But no sooner was Carney out of sight of the woodlands office than he expressed his disdain of Dickson and the St. Croix Lumber Company. He ranted and raved over the capitalistic tendency of the age, and concluded with a threat to do nothing at all that could be in the nature of aiding the fire protection program adopted by the company. And when remonstrated with by Leonard, all Carney would offer as an excuse for such talk was that the company was an oppressor.

It was in vain that Leonard had pointed out to his companion the need of each becoming a cog in the fire fighting and prevention machine organized by the company. Carney had become imbued with Communist tendencies, had been devouring radical literature, and was an apostle of Communism. As a symbol of his hatred for all others who did not agree with his rantings and ravings and his impossible doctrine, as formulated by Lenin and Trotsky, he started wearing a red necktie and learned the words of the Internationale, the Communist "national anthem."

Not content with becoming a Communist himself, Carney insisted that his friend join "the cause." But Leonard consistently refused, and this seemed to add to Carney's bitterness against capitalism as represented by the St. Croix Lumber Company. He contended that the fire protection program adopted by the company was just another means of keeping the employees of the firm in subjection by making them ready at all times to respond to the call of the company. There was no need of fire protection. It was but camouflage to turn the employees into slaves. And in addition to enslaving their employees, the company had availed itself of the opportunity to "use" the two squatters, at no expense to the company. He would see the company in flames before he would act as a member of the fire police. In short he would do absolutely nothing to lessen the risk of fires. He would serve as no tool for the company, regardless of what Leonard chose to do.

In the end, although Leonard was at heart a man of peace—a man who typified the very spirit of peace and harmony as exemplified in the great outdoors, amid the gigantic forests of the northeast, the friendship that had existed for twelve years between the two guides, turned cold. Not that Leonard felt ill will toward his erstwhile pal. He was really sorry for Carney, inasmuch as the latter, a rather decent fellow at heart, had allowed himself to be carried away by Communist literature.

Leonard accused Carney of being a tool of the company. Sandy merely laughed. This saddened Carney, who threatened his old friend with a beating. And this caused Sandy to laugh even harder. Angered beyond control, Carney essayed to fulfill his threat. And there amid the maples, poplars, spruce, cedars, firs, hemlocks, the two human residents of the St. Croix forest battled for physical supremacy.

Back and forth over the turf, the men struggled. First one would have the advantage. Then the other would seize the lead in the see-saw combat. It was the most vicious rough-and-tumble battle ever seen along the St. Croix. No rules were violated, for there were no rules to govern such knock-and-down and drag-out clashes. Punching and kicking, gouging, wrestling, elbowing, were all in use.

The cross buttock and the backheel, were frequently in evidence. Carney was reputed to be the champion rough-and-tumble fighter of the river. Leonard was not anxious to use the questionable methods of the rough-and-tumble combat, but had he contented himself with using fair fighting methods he would have been incapacitated in a very few minutes after the start of the struggle.

After an hour of give and take, principally take, Carney weakened. Leonard saw an opening and whipping over a stiff right to the body sent Carney to the earth, for the latter's quietude. The victor revived the vanquished, and each went to his cabin to recuperate, after the desperate battle.

It was soon after midnight, that Sandy Leonard intuitively smelled danger. Although sore from head to foot, he leaped from his bunk, and peered through the windows. To the east, was a red light just topping the trees.

"It's a forest fire," he shouted. Roused from his semi-sleeping condition by this startling news, he donned his clothes and ran from the cabin. Leonard hastened along the river bank, to the spot the woodlands manager had told him of choosing as the first telephone station in the link to be constructed by the company. The fire was fast growing in intensity. Right in the path of the flames was Carney's cabin. Apparently, the fire had not been started more than an hour. Seizing the telephone, Leonard explained the situation to the Milltown office. Then Leonard battered through the door of the Carney cabin and found Carney asleep. It was with difficulty that Sandy could induce Carney to arise. The flames had eaten part of the rear of the cabin before the two men left the little structure. In a few minutes the building was a mass of smouldering ruins. They went to the telephone station, and found the flames had burned the telephone and some of the connecting wire. Animals of all kinds were scurrying from the woods and racing into the river, too frightened to see the two men on the river bank.

In twenty minutes there arrived from Milltown, the nucleus of the fire department that was in process of formation among the employees of the St. Croix Lumber Company. The motor equipment of the company had been pressed into service. Fifteen men and each with a fire extinguisher, Carney took charge of the hose and hand pump and conscripted Leonard as his assistant just as Leonard was rushing for an axe to fell trees that stood in the path of the flames. Leonard was so astonished at the change of heart on the part of Carney, he made no protest when ordered by Carney to help with the pump and hose. Water from the river was soon pouring on the fire. The wind was not strong and that aided the fire fighters greatly. So, in two hours, just a vestige of the fire remained.

When the work was over, Charlie Dickson thanked the two woodsmen for saving the company's timber, for he said there was no doubt that with a longer start, the fire would have destroyed the bulk of the forest.

After the party had left for Milltown, Carney turned to Leonard and said:

"Say, Sandy, a fellow can be an awful fool, can't he? After what I did to you here you come and save me from sure death. Do you know what started that fire? Well, against the orders of the company I started burning some slash, above the cabin. I thought it was out when I left it. But that's what started that fire. You can say I'm cured, and that in future I'll be as strong for fire prevention in this forest as you are. Beats all how blind a man can be at times. Some times he doesn't even know which side his bread is buttered on."

Even fifty years ago, taking a single picture was often a day's work, and required such skill and expert knowledge and such elaborate, costly, and cumbersome equipment that the few who had mastered the art were glad to capitalize their knowledge by utilizing it professionally.

The earliest sunlight picture of a human face is supposed to be a daguerotype of Miss Dorothy Draper, and was taken by her brother, Professor Draper, in 1840. The subject had to sit motionless in bright sunlight for about six minutes.

**Rain at Para.**

The port of Para, near the mouth of the Amazon, has a rainy season, when rain falls continuously, and a "dry season," when it rains every day. "I'll see you to-morrow morning after the shower," is a common way of making an appointment. You step into a cool shop to escape the burning sun, says a traveler, and while you are making a purchase the street outside is deluged. A clerk hastily closes the doors, or the place would be flooded. By the time you have paid your bill the sun is again shining brightly. But the shower has cooled things off.

**Rat Campaign.**

Rat week in London was a bad week for rats. More than three million were killed by professional rat catchers, ordinary householders, and boys and girls. One vermin-exterminating company alone killed eight hundred thousand. But London sanitary officers are not yet satisfied; they want the campaign to continue until the city is free from rats.

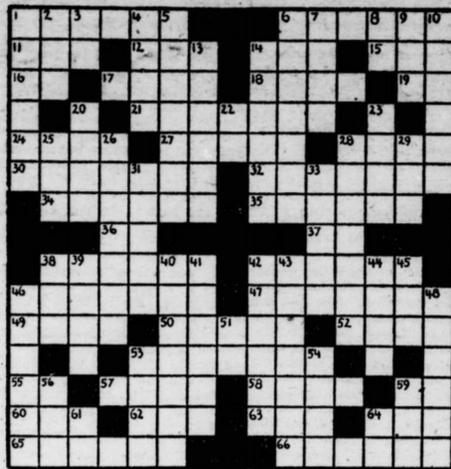
**White Topaz.**

A white topaz that weighs ninety pounds has been placed on view in the Field Museum in Chicago. The head of the department of geology, who led an expedition to South America, brought it from Brazil. Lapidaries estimate that it would make at least a hundred thousand stones of one carat each, but the museum naturally has no desire to put it on the market.

**Home.**

There is one debt that you can never pay in full—your debt to your mother. She does not ask it or expect it. All she asks, all she hopes, is just that you pay the interest on it. And you cannot pay even that in money, but only in patience and love and gentleness—the one kind of currency that is legal tender in the place where mothers go.

## CROSS-WORD PUZZLE



**SUGGESTIONS FOR SOLVING CROSS-WORD PUZZLES**  
Start out by filling in the words of which you feel reasonably sure. These will give you a clue to other words crossing them, and they in turn to still others. A letter belongs in each white space, words starting at the numbered squares and running either horizontally or vertically or both.

### HORIZONTAL

- 1—Pushed
- 6—Small containers for liquids
- 11—A unit of weight
- 12—A precious stone
- 14—Anger
- 15—A small child
- 16—A note in music
- 17—Bartle
- 18—Blood
- 19—Personal pronoun
- 21—To disturb
- 24—Product of a tree
- 27—A singer
- 28—East Indian tree
- 30—Individual characteristics
- 32—Portions of bacon
- 34—Most unusual
- 35—A powerful nation
- 36—Farming activity (abbr.)
- 37—A letter
- 38—Decorative
- 42—Position in golf
- 46—Prophets
- 47—Inclines to one side
- 49—A parent (French)
- 50—A leather fastening
- 62—To be borne along
- 63—A ship
- 65—To escape
- 67—To beseech
- 69—An interjection
- 60—A dog
- 62—Part of the body
- 63—To place
- 64—To fumble
- 65—Dried stems of grain
- 66—To wish for

### VERTICAL

- 1—Scattered
- 2—Garden implement
- 3—A preposition
- 4—An exclamation
- 5—Takes out
- 6—Order of proceedings
- 7—At hand
- 8—A preposition
- 9—Depressed
- 10—Cut of beef (pl.)
- 13—Slightest
- 14—To disregard
- 20—Something insignificant
- 22—An article
- 23—To peep
- 25—Implement on a boat
- 26—Imprisonment
- 28—More sparse
- 29—Part of verb "to be"
- 31—In kingly fashion
- 32—A weapon
- 38—Metal in native state
- 39—Seldom seen
- 40—Those who test
- 41—Regard
- 42—Scalwags
- 43—With sloping ends
- 45—Limit
- 46—Pertaining to the eyes (pl.)
- 48—A legislative body
- 51—Sun god
- 53—Cabbage salad
- 54—Comparative value
- 55—Product of a tree
- 59—Possessive pronoun
- 61—A common carrier (abbr.)
- 64—Printer's name for mixed type

### The First Photographs.

In the first attempts to make a photograph in the early part of the eighteenth century, the subject to be photographed sat between the source of light and a sheet of sensitized paper fastened on a board. His shadow blocked off a certain proportion of the light rays, and as a result his profile in silhouette was left on the paper. This image, however, faded in a few minutes.

Even fifty years ago, taking a single picture was often a day's work, and required such skill and expert knowledge and such elaborate, costly, and cumbersome equipment that the few who had mastered the art were glad to capitalize their knowledge by utilizing it professionally.

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### Solution of last week's puzzle.



### Method of Winding Spring.

To wind a spring in a lathe is a simple matter; to wind it without a lathe is also a simple matter if one knows how. Select a bolt having threads about corresponding to the pitch desired in the spring. Hold the head of the bolt firmly in a vise, pinch one end of the wire tight and wind the other end around the bolt. The threads of the bolt will guide the wire so that an equally spaced spring will be formed.

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It is estimated that the whole value of the commercial crop of all fruits in 1923 was \$33,169,143.



This snap shows a winter scene on Lake Joseph, in Muskoka, where many people spend their vacations each year.

## Natural Resources Bulletin.

The Natural Resources Intelligence Service of the Dept. of the Interior at Ottawa says:

At the recent meeting of the Canadian Society of Forest Engineers a matter of supreme importance to Canadian industry was discussed, that of waste in lumber manufacture. Mr. W. Kynch, Superintendent of the Forest Products Laboratories of the Dept. of the Interior, brought up the subject, and made the statement that the waste involved in the use and manufacture of forest products is tremendous. Waste in production of lumber, in cutting or making various wood goods, and waste through decay were some of the chief items of wood waste emphasized.

In a report by R. D. Craig, on the Forests of British Columbia, the writer deals with the waste of forest products as follows:

"The waste in the manufacture of lumber in this province is appalling to one accustomed to more conservative methods. Huge slabs of absolutely clear wood, 3 to 6 inches thick, are sent to the fuel pile, and ends of boards and timbers which could well be used for some purpose are sent to the refuse burner. The burner is the most conspicuous thing about a British Columbia sawmill. The fire never goes out, and it furnishes a pillar of fire by night and a cloud of smoke by day. Heavy saws are necessary to "break down" the large logs, but it is not unusual to see one-inch lumber being cut with a saw that takes out a 5/8-inch to 3/4-inch kerf (cut). It is estimated that at least 25 per cent. of the tree is left in the woods, and another 30 to 35 per cent. is wasted in the mill."

Calling attention to wood waste in manufacture, where the consumption of wood is under control is of first importance. Losses by forest fires, by insect and fungus destruction, by wind-throwing, and other causes are already heavy, and more or less beyond control, but when the lumbermen and millmen undertake to convert the tree into lumber it should be done with the minimum of waste.



He—Surely you wouldn't marry a rich man who'd made his money dishonestly?"

She—"Sure. If he were rich, I could reform him."

### A Fortune in a Match Box.

The third biggest diamond in the world has recently been brought to London, and now reposes in the strong-room of a city bank.

This precious stone, formerly called the Excelsior-Jubilee, but known now as the Tata-Jubilee, after its owner, Sir Dorabji Tata, came from the famous Jagersfontein mine.

It originally weighed 971 3/4 carats, but was reduced by cutting to 239 carats. Even so it has had the distinction of being the biggest diamond in the world belonging to a private individual, the two Cullinans, which weigh 516 1/2 and 309 carats respectively, being the property of the crown. Valued at a million and a half dollars, it is easily contained in an ordinary match box.

### What Impressed Him Most.

"Tell me," said the interviewer at the bedside of the aviator who had fallen three thousand feet and hit the earth, "what was your dominating thought as you fell through all that space?"

True to his record for coolness, the aviator lit a cigarette, smiled, and said:

"Why, I think the thought that impressed me most was that I was about the only thing that wasn't going up."

### White Topaz.

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### Home.

Heaps of faith in one another. O'er the years what'er they bring. Memories and not one bitter. Each for all in everything!

There is one debt that you can never pay in full—your debt to your mother. She does not ask it or expect it. All she asks, all she hopes, is just that you pay the interest on it. And you cannot pay even that in money, but only in patience and love and gentleness—the one kind of currency that is legal tender in the place where mothers go.

## The Automobile

### HEADLIGHT ADJUSTMENT.

Procedure for headlight adjustment is as follows:

Place car on level surface so that the headlamps are twenty-five feet from the wall or screen.

Examine bulbs and reflectors. Repair or replace if necessary. See that the lenses are installed so that they cannot turn in the lamp door.

Examine focusing mechanism. See that it works freely but will not jar out of adjustment.

Measure the distance from the floor to the centres of the lamps. Subtract the loading allowance and set cross-bar or mark the wall at that height.

Light the lamps. Cover one at a time, and focus the other. Always focus with the lenses in place if the lamps have an outside adjustment.

Aim the lamps so that the top of the beam on the wall comes even with the cross-bar or mark.

### CARBON MONOXIDE.

During the ensuing cold weather, you will be doing work on your automobile indoors, which you have lately been doing out in the open air. Remember, if you have your engine running in the garage, that the exhaust contains the deadly carbon monoxide, a gas which is poisonous to breathe. Play safe and either have your door open when the engine is running or make other provision for the rapid escape of exhaust gases.

Carbon monoxide stupefies so quickly and completely that its victims seldom have time or consciousness to save themselves. They drop before they can call for help and once they drop they're done.

### Haying Under Fire.

Much has been printed about the war, but comparatively little about those stirring, tragic or merely human episodes that passed on the distant front where Russia and Austria came to grips. In the London Times there have recently appeared some interesting articles by Gen. Likonovsky, who was Chief of Staff of the Russian Army during much of the war. From one of them we take this amusing extract:

The "Brustloff offensive" occurred on the southwestern Russian front in the spring of 1916 and ended in the crushing defeat of the Austro-Hungarian army. On June 3, the eve of our assault on the fortified positions of the enemy, I made a round of the front-line trenches. While going down the line of the Rylsk regiment where our wire entanglements were interwoven with those of the enemy I stopped a moment to study the enemy's position through a periscope. Next to me stood a private. From the expression of his face it was plain that he was anxious to tell me something. So I encouraged him to speak by asking what he thought of the Austrian position.

"I dare say pretty strong, Your Excellency," the soldier answered in the simple speech of the peasant. "But we are going to take it to-morrow just the same, and then I'll get lots of nice hay for our horse."

"What hay? What horse?" I asked the queer fellow.

"Why, I am the company stableman, Your Excellency, and in front of the Austrian trenches there is such nice, fresh grass."

I could not help telling him that he was a maledet (fine, brave fellow) for looking after his horse like that, and, although I never thought of taking his words seriously, I wished him good luck in harvesting Austrian hay.

At daybreak of June 4 fire opened on the appointed targets by every piece of artillery massed along the sector of my division. After the cannonade our division went forward. Our success was decisive; the entire Austrian fortified line was taken.

Watching the attack of our division through my field glasses, I had my attention drawn to a figure just behind our advancing lines, where enemy shells were bursting on every hand; the figure appeared to be busy—mowing grass! I rubbed my eyes in amazement. To make sure I asked the commander of the artillery, who was standing beside me, to take a look for himself. He at once confirmed what I had seen: yes, there was a soldier out there swinging a scythe!

On the evening of the same day I saw the stableman of the Rylsk regiment, happy and unharmed, elated at having cut some nice grass for his horse. The soldier never suspected that he had shown bravery of the highest kind.

### Winter Puts Snow Cap on Volcano in Hawaii

Mauna Kea, one of the Pacific's highest mountain peaks, recently donned a coat of fresh snow as a result of Hawaii's "winter weather."

The great mountain, which caps the island of Hawaii, hid itself in the clouds for a few days while the rest of the island enjoyed tropical weather. When the clouds lifted, those who stood on the warm beaches saw the snow.

Hundreds of tourists continue to visit the volcano, the largest party of recent date being that from the Red Star liner, Belgenland, which stopped at the island on its way around the world.

## WHEN THE STORM BREAKS

The weather in the Atlantic was so bad during November and December last that even huge forty thousand ton liners were thrown about like cockle-shells, and one of the largest arrived in port with three passengers injured.

Such accidents are no fault of the officers of the ship, who take every precaution to save passengers and crew alike from coming to any harm. One of the first things that every junior officer learns when appointed to a liner is what to do when a storm blows up.

In these days the captain does not have to depend entirely upon the barometer to warn him of the approach of a storm, for he gets news by wireless long before his ship strikes the bad patch, and can estimate to a nicety just what is going to happen.

### Fixing the Dead-lights.

As soon as it is certain that there really is going to be a storm, various officers are dispatched on a round of the ship. One sees that all the storm doors are closed, and also that all port-holes are not only closed but properly screwed down.

If indications point to a very heavy gale, the dead-lights are closed down over the port-holes and firmly fixed. For, thick as is the glass of a porthole, a really bad sea will smash it like an eggshell.

Another officer goes below to make sure that all the water-tight compartment doors are working properly. The arrangements for closing these are most ingenious, and they are built to withstand enormous pressures.

The next thing to be done is to provide for the personal safety of the passengers themselves, who, if the sea is running really big, are not allowed on deck at all. No exception is made to this rule, which prince and pauper alike must obey.

### \$7000 for Breakages.

Meantime, down in the saloon and smoking-rooms an array of stewards is at work, lashing all furniture to pillars and other supports, so that it shall not break away with the motion of the ship. A big plant stand or a heavy sofa is a positive danger when it is rushing from side to side with every roll of the vessel.

In the galleys and pantries, also, everything that can be secured is made fast. Even so, the breakages are terrible. Not only glassware and crockery are smashed, but also chairs and tables. One bad gale during a crossing will mean a bill of anything up to twelve or fourteen hundred pounds for breakages alone, quite irrespective of damages to the ship herself.

### In London Spats Hide Identity of Bandits

If you wear spats in London you're respectable. That at least is the conclusion drawn in a newspaper discussion on the recent burglary in the heart of London. Several persons saw two thieves back up a van to the door of a warehouse and carry off goods worth £1,200, but inasmuch as both burglars wore spats nobody thought there was anything amiss.

"The Daily Herald," the labor organ, passionately attacks the public attitude in this respect, remarking bitterly: "With a good suit of clothes, a good hat, a pair of spats and plenty of cheek there is scarcely any limit to the frauds a cool swindler can perpetrate."

London journalists who wear spats in winter because it's cheaper than buying stout shoes now wonder whether they may not be apprehended as confidence men or burglars.

### London Decries the Razing of Waterloo Bridge

After St. Paul's—Waterloo Bridge! While the controversy concerning the safety of the dome of famous St. Paul's Cathedral was still raging, Londoners with a taste of antiquarianism were confounded by the recommendation of the London County Council committee that Waterloo Bridge, built just over 100 years ago by John Rennie, be completely demolished instead of merely being restored.

At present there is a temporary span being built to the east of Waterloo Bridge, which it has been planned to repair. As Waterloo Bridge is considered the best architectural work of all across the Thames, the Society for the Protection of Ancient Buildings is organizing a strong protest against the proposal to replace it by another.

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