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THEY REIGN NO LONGER.

HALIFAX GASLIGHT COMPANY'S MONOPOLY ENDED.

The Advent of a New Company Brings the Old Stock Down—Story of a Lawyer who Paid the Wrong Bill—The Wanderers Have an Impartial Referee.

HALIFAX, Nov. 14.— These are troublous times for the Halifax Gas Light company. For forty years the company has had a monopoly of the gas lighting of this city. They could charge what price they pleased, and exact what conditions from customers they chose. The stock of the company was second to none in value and profitableness. While other cities were getting gas at figures between $1 and $2 per thousand feet we in Halifax have been paying $2. per thousand. And we with unlimited supplies of coal at our doors. this did seem remarkable. The gas company's reign has now come to an end it seems. A few years ago the stock, which has a per value of $100, sold at $120 or more. During the past couple of months it has came down by steady steps but today it will not bring more than $65. It has fallen from $80 to $65 within three weeks or so. A well-known city newspaper owner, who is largely interested in the gas company, is reported to have lost $5000 on gas stock recently, and another deal he made was to buy a large block at $80 only today to find the price $15 per share less.

The reason for this wholesale stump is the advent of a new company which shows signs of considerable energy. The impression prevails that it is composed of pretty much the same people who are at the back of the electric tramway company. A $200,000 contract has been given for laying the pipe, and already ten miles of wire have been purchased from the Londonderry works and a considerable section of trench has been excavated and the pipe laid. Making gas is said to be only one part the new company's miseries. They will utilize and sell all the products of the coal as well as the gas. The old company has not much sympathy now that its troublous days have appeared. Every dog has its day and they had a good long one.

An amusing story is being told of a very well-known lawyer in this city who paid a $25 debt that he had no idea of liquidating for some time to come. The legal light in question has frequently borrowed sums of money from Mr. A. W. Redden, one of our leading business men. Mr. Redden invariably received his money back sharp on time. On this occasion the lawyer borrowed $25 for one week. The week had expired and one or two days more, when Mr. Redden met the legal light, this was the conversation that ensued:

Mr. Redden—"When are you going to let me have that $25, old fellow? I'll be glad to get it when convenient.

Legal light—Why I sent the money to your office two days ago and got a receipt.

Mr. Redden—Oh no, you didn't. I have not yet received a cent of it.

Legal light—Hold on a minute, and I'll go down to my office and get the receipt. I know where to put my hand upon it.

Mr. Redden—All right, bring it along.

Five minutes later the lawyer came back with a piece of paper held triumphantly up. "Here it is," he said.

Mr. Redden took it with some trepidition, but the bland smile that overspread the good-natured alderman's features can be imagined when he read the receipt. It was a receipt from the painting firm of Thomas Reardon, and read: "Received $25 from ——— on account." Then the lawyer sadly saw that a grievous mistake had been made by somebody.

The explanation is that the lawyer had told his office boy to take the $25 up to Mr. Redden and get a receipt. The youngster did not distinguish between the words "Redden" and "Reardon" and took the money to the latter. The lawyer had no idea of paying the latter, but he could not get his money back and all there remained to do was to pay out another $25, this time making sure that the right man—or the man he intended—received the cash.

The question is whether the sum of the trios happiness is greater on account of Reardon's unexpectedly receiving the $25, and the lawyer's unexpectedly paying it, than if the lawyer yet had the $25 paid to Reardon in his pocket book.

The Wanderers are the Nova Scotia football champions for this year, by virtue of their defeat of the Dalhousians in a former match, and the draw played on Saturday. The Wanderers made one goal against the college, and that gives them the proud title they enjoy—a title that for two years previously Dalhousie held, with good scores to their credit.

There is not the slightest doubt that the best team won this year. The Wanderers indisputably have the best fifteen and they deserved to win as they did. Their careful and persevering training; their painstaking selection of material; the time spent in coaching and practice; their good management, produced the victory the red and black are now enjoying. It shows of what fine stuff the wanderers are made, that they learned the lessons taught by defeats two years in succession. They took the lessons to heart, profited by them, and now are the champions.

Another thing of which the Wanderers may be proud is that their club furnished a referee so capable, so impartial, and who inspired such general confidence as W. G. Robertson. The defeated team are just as loud in Mr. Robertson's praises as are the victors, in fact they are even warmer in their praises of him. It was some hostile criticism along the ropes, uttered by Wanderers, that caused Mr. Robertson to write to the captain of the Wanderers declining to act as referee in the final match. Happily Mr. Robertson's scruples were overcome, and he has the satisfaction of knowing that he ends the football season the best referee who ever officiated in Halifax. The wanderers have a double honor this year, then, in the possession of the champion team, and a perfect referee.

THOUGHT OF SOMETHING.

A Mountain Girl's Bright Idea That Saved the Lives of Passengers.

"Speaking of experiences on the railroad," said a New York travelling man, "I had a slight scrape one time on a mountain road in Tennessee that may be worth the hearing.

"We were coming down a long grade of ten miles in a mixed train. That is, we had a gondola loaded with ties as the end car, with our two passenger coaches and baggage car, and I should say we were making about twenty miles an hour on a track that would be treating us very kindly if it didn't sling us into eternity if we dared to add five miles an hour to our speed, when I happened to look out of the rear door and saw a wild train of loaded coal cars swinging down after us. They had evidently started at a tipple which we had passed only a few minutes before, and when I saw them they were going so fast that they distanced the men on the ground, who made a run to get on and stop their further flight. I made a wild rush for the conductor, but before I reached him he had ordered the engineer to let out his engine for all she was worth, and in this way keep ahead of our chasers. Fortunately we had no women aboard, and the men could be kept in better control, though it was all we could do to keep them from jumping off.

"It was only a short time until we began to see that our salvation lay in the pursuing train flying the track, because we had reached our limit, and our train was swaying and tossing so that everybody was scared out of his wits. I know I was, and I just sat in my seat and held on, waiting and listening to the thunder of the train behind us, which was not 500 yards away and gaining every second. It was far heavier than ours, and I knew that if anybody went off the track it wasn't going to be the coal train. I said a moment ago we had no women aboard. I meant we had none to speak of.

"There was one, but she was a homely mountain girl, who didn't seem to know anything, and because she sat quiet in the corner and didn't scream, we thought she didn't amount to enough to count. I was looking at her in a dazed kind of a way, when all of a sudden she lit out of her seat as if she had been shot out of it, and, knocking everybody out of the way, she dashed out of the rear door before anybody could touch her, and we thought she had jumped off, but she hadn't. She jumped for the open car, hanging on like a cat, until she got to the far end of it, and in a second she was tumbling off those ties at the rate of a dozen a second.

"They would hit the track and bounce every way, but she kept piling them off the coal train getting closer every second, and at last a couple of them stuck up in a cattle guard, and the next thing we knew there was a terrific crash, rails and ties and tracks, and coal cars flew, and the coal train rolled over itself and went down the hill in a heap. By George, as that girl stood there in her plain calico dress and her old sunbonnet and watched that train pile up at her feet, I thought that Joan of Arc, Cleopatra, Queen Elizabeth, Grace Darling, and the lot of them weren't a patch to her, and, as far as we were concerned, they weren't

"She had saved our train and our lives, and we took her on with us in triumph. Then we made up a purse big enough to buy a farm with, and I'll bet she's got more good clothes and jewelry and books and trinkets and things than any girl in the mountains, for we never forget her. She doesn't quite appreciate some of the fine things she has, but what do we care for that; we appreciate her just the same."—Washington Star.

To Keep Her Quiet.

Wife—Well, Doctor, how is it with my husband?

Doctor—Fair, to middling, so as to speak; he wants rest above all things. I have written out a prescription for an opiate.

Wife—And when must I give him the medicine?

Doctor—Him? The opiate is for you, madam.

TESTING THE DIAMOND.

EXPERTS EASILY DISTINGUISH GOOD FROM BAD.

Some of the Ways in which the Real Gem will Prove Itself—Diamonds Are Used for Much More than Ornament—Their Wide Employment in Many Arts.

Nothing in nature is oftener looked for and more easily found than the diamond, and many supposed finds prove disappointments says Geo. F, Kung in the N. Y. Sun. The fine diamond should be clear and pure as rock water, perfect in shape, and not only pure white, but lively, showing fire, as it is termed. Any undecided tint of brown, yellow, grey, or other color is a positive blemish. The simplest test to identify the diamond is to hold the stone firmly against a wet, rapidly revolving grindstone for from five to ten minutes. If the least mark appears upon the piece it is not a diamond, for if it were a diamond, so far from any mark being produced on it, it would be likely, on the other hand, to make a deep impression in the grindstone. The same test may be made with emery paper, or an emery wheel, neither of which, although harder than a grindstone, will make any impression upon a diamond.

We often hear it said that a number of different stones will cut glass. The truth is, that only the natural edge of a diamond crystal will cut glass, while many stones, such as the sapphire, ruby, quartz, and even common paste, will scratch it.

Some diamonds exhibit an abnormal degree of hardness, especially some very beautiful black ones from Borneo, which cannot be ground or polished by anything but their own dust, frequently, having no effect upon them at all. One of these was made the subject of special experiment by Babinet of Paris, in behalf of the French Academy of sciences. It showed great resistance to the polishing wheel, and the process of preparing it took a very long while.

A similar experiment was made in this country in 1885 and 1886 by myself at Messrs. Tiffany & Co's, New York. The stone here was a round piece of Brazilian bort, with a radiated internal structure. It was kept on a polishing wheel made of hard iron with a diameter of one foot for seven and one-half hours a day for nine months, the wheel turning at the rate of 2,500 to 3 000 revolutions per minute, and giving three feet of travelling surface to the stone. The total distance travereed was 170,000 miles, or about seven times the circumference of the globe, but the result was the polishing of only about one square centimeter of surface. With an ordinary diamond fully a hundred times as much would have been accomplished.

Diamonds vary widely in hue; the purest are perfectly colorless and transparent, but they are found in almost every color of spectrum, the commonest being white, yellow, or brown, bottle green, and rarely rose red, blue, or black. Next to the yellow-greenish, yellow diamonds are the most numerous. The black are very rare, and when the diamond is between the brown and the black, its transparency entirely disappears, or is seen only at the angles.

Perfectly colorless diamonds come from the mines of India, Brazil, the Cape, and Australia. Perhaps about ten per cent. of the crystals which come into the market are colorless or of pure white; one-fourth are of fair color, with a flaw or spot of color, and the remainder are off-colored, called second quality, or bywater. Nearly one-half is only bort.

Colored diamonds exhibit their lustre and clearness best when cut, especially the yellow ones, which by artificial light are very brilliant. Stones either perfectly colorless or having decided tints of rose-red, green, or blue, are most highly prized. Fine cinnamon and salmon tints, or brown, black, or yellow stones, are also esteemed. If flawless and without tint of any kind, they are termed "first water." If they possess a steely blue color, at times almost opalescent, they are called blue-white. Such are usually Brazilian stones.

Exceptionally perfect stones are termed gems, and for such there is no fixed value, the price depending on their purity, perfection, and brilliancy, freedom from flaws It is impossible to estimate the value of a diamond by its weight alone, as color, brilliancy, cut, and general perfection must all be taken into account. Of two stones, both flawless and weighing ten carats each, one may be worth $6000, and the other $12,000. Exceptional stones often bring special prices, whereas off-colored or imperfect stones sell at from $30 to $75 a carat, regardless of their size.

As the diamond is a cold substance, a mist is formed by breathing on it, and the mist being white, enables us to detect any color in the stone: or if the stone is unset, it may be placed on a sheet of white paper and breathed on, and while the mist is clearing away the faintest trace of color, and even flaws and imperfections, if visible otherwise to the naked eye, will become apparent. If the stone is set and we fold a sheet of paper and look down on the side of the stone, we can trace any color that exists within, for the same reason that a piece of plate glass when looked through appears deep green on the ends. A small pile or paper of diamonds will show color, whereas a single stone may appear white to the unpractical eye; as likewise a sheet of plate glass one-fourth of an inch thick and one foot long is seen to be green, though a piece one inch square appears white, the color in both cases being condensed in the quantity.

For this reason off-colored diamonds are frequently cut with a very low, flat crown (the part of the stone above the centre). This disguises the color, though at a loss of brilliancy.

In many diamonds the interior of the crystal, the core as it is called, is not clear, but shows greenish or blackish spots, particularly in the green stones. Many have also "feathers" and fissures, which impair the passage of light.

By means of chemical agents and a high temperature Barbot claims to have succeeded in removing the coloring matter from rough diamonds; green, red and yellow stones becoming perfectly colorless, while the dark yellow, brown, and black gave up very little of their color. This seems scarcely possible, though M. Barbot, on the title page of one of his works, styles himself, "Inventor of a process to decolorize a rough diamond." De Boot made the same claim in 1608, and in 1880 the English Government granted a patent for the same process.

De Boot says that his imperial patron, Rudolph II., possessed a secret which enabled him to clear any diamond of flaws and color. No such process is now known, and a fortune would await its discoverer. It is claimed that some yellow diamonds turn pink upon heating, like topazes, but, unlike them, resume their former color after a time.

The diamond is one of the gems most readily identified by the eye, and it is next to impossible to deceive an experienced dealer. Let one of several imitations, or even such precious stones as white topaz, sapphire, beryl, phenacite, &c., be put among a lot of thousands of diamonds. While a dealer is counting he can at a glance detect the false ones, and throw them out without missing the count, even if he is counting three at a time, more rapidly than bills could be counted.

The various tests described by the press, such as the use of acids, files, &c., are never resorted to by the jeweller. More persons than would be supposed know diamonds, and, once having worn them, one is not likely ever to wear paste through deception. It must also be said that the danger of buying imitation stones is not so great as that of getting diamonds worth not one-half their price, owing to inferior quality.

The fact that the diamond can be burned was first observed by Cosmo I. of Tuscany in 1691. He used a powerful lens concentrating the sun's rays, and found that in that heat the diamond was consumed. Previous to that time it was believed that this hardest of all stones was indestructible by either acids or fire. If enclosed in a retort or crucible from which air is excluded, it does, indeed, seem unaffected by any amount of heat that we can apply, but if air or oxygen gas be admitted, and the temperature be raised to a point that corresponds to 5,000° of Fahredheit's scale, the diamond will burn like coal, uniting with oxygen to form carbon dioxide. It is also proved that if a diamond be heated in a crucible with iron, the latter is converted into steel by union with the carbon of the diamond.

There is another variety of diamond carbon that differs greatly from the gem form, being brown, grayish black; this is known as black diamond, bort, bortz, carbon, or carbonado, and is entirely distinct from the crystalline form.

Then there are rounded masses, with a greasy lustre, and an imperfect radiated crystalline structure within, apparently made of a twining of many cubic crystals, white, gray to black, and translucent. These are called round bort, and are found in irregular masses with no crystalline form or aspect. Both these forms are obtained in the province of Bahia, Brazil. Round bort has varied from $3 to $20 carat within the past fifteen years.

All these are valuable for their cutting power, and command good prices, though the African or Cape bort, as it is called, is less esteemed than the Brazilian carbonado and round bort are harder and tougher than crystalline diamonds, and are less dense, owing, probably, to a porous structure, or to minute cavities. A fraud has, at times, been practised with these materials by coating them with lampblack and wax, which produced a fine compact black appearance and increased the price, the wax being sold at the price of the best grade of carbon.

Its great hardness gives the diamond, in all its forms, a high importance in the mechanical arts. The poor, flawed, and imperfect crystals the fragments and cleavages, and the powder produced by crushing them are all used for cutting, polishing, and engraving precious stones, glass, &c., but the hard, black varieties, bort or carbonado, are extensively employed in larger operations. What is called the diamond drill, invented by Lesshot in 1860, has revolutionized the methods of tunnelling, mining, and well-boring in the course of a few years. The general idea of it is a steel tube of the size desired for the boring, say from one to eight inches in diameter, on the extreme end of which are fastened a number of small pieces of bort. By means of suitable machinery this tube is then rotated, pressing against the rock, to be penetrated The result is that the tube rapidly cuts its way into the rock, making a smooth, circular hole; while a rod or core of the rock passes up inside of the advancing tube, and is removed piece by piece as it rises. These cores are often of great value, as exactly showing the kind and thickness of rock traversed in any such working; and drilling in mining and engineering operations is frequently resorted to simply for this purpose. It was due to diamond drills that the Mt. Cenis and other great tunnels were completed in a few year's time.

At the great salt deposits of New Iberia, La., the company desired to ascertain the depth of the mass of rock salt, and sank a boring for the purpose. The drill penetrated through 600 feet of solid salt, the cores furnishing the evidence, and 30,000 feet can be drilled in a perpendicular line.

Tools with diamond edges are used for "trueing" and grooving the faces of emery wheels and grindstones; for trueing the faces of hardened steel, rubber, porcelain, granite, celluloid, and calendar rolls; for trueing the inside of case-hardened cylinders for gas engines; for cutting all kinds of glass; marking tempered metal, glass, stone, &c. It is easy now to sink artesian wells to far greater depths, and at far less cost than could be possible without the diamond drill.

Another similar application has lately been announced. A thin circular disk of steel several feet in diameter is set with a number of pieces of diamond or bort, firmly brazed in place and distributed over its sides. This disk, when rotated, forms a circular saw of great power, which will cut through large blocks of hard stone very easily, and at very small cost. For sawing sandstone, granite, and other hard stones the diamonds are brazed into the edges to a straight blade of iron, which gradually cuts the stone while it is drawn back and forth.

The name "diamond points" or "diamond sparks" is given to small natural diamonds used for glass cutting; "diamond splints" (commonly called "writing diamonds") are small cleavings of diamonds put into a metal handle and used for writing on glass and other hard substances.

"Slabs" are thin cleavage plates of diamond that are drilled with minute holes of various sizes and used for drawing fine gold, silver, brass and iron wire; a single slab will draw miles of wire. These are now successfully made by D. D Palmer of Waltham, Mass. Thin "slabs" are drilled by charging a fine iron point with diamond dust, which frequently requires weeks of time.

The name "diamond dust" is applied to the material that falls from two diamonds when rubbed together in the cutting process, or to bort itself when it is crushed, to be used on soft iron wheels for slicing and engraving precious stones, glass, metal, and other substances.

A very curious and interesting fact is the occurrence of diamonds, or, at least, of diamond carbon, in meteoric stones and irons—those visitors to our earth from interplanetary space. Diamond was first discovered in a meteorite at Nova Ureii, Russia, some ten years ago, and in 1891 its presence was recognized in the meteorite found at Canon Diablo, Arizona. It was detected by Dr. A E. Foote, described by Profs. Koenig and Huntington, analyzed by Friedel, and, finally, its hardness tested by Dr. Huntington and myself, As a conclusive test we subsequently polished two diamonds with the powder taken from the meteorite in the Tiffany cutting exhibit at the World's Columbian Exposition in September, 1893.

Opening an Umbrella with One Hand.

"Not infrequently," a stroller, "you see people with arms full of bundles making hard work of opening an umbrella. There is a very simple and easy way of opening an umbrella with one hand, known to many but perhaps not to all. You grasp the little cylinder around the handle, to which the lower ends of the ribs are attached, plant the point of the umbrella against a lamp post, and push until the little cylinder catches on the upper catch, and there you are, without the least trouble in the world."

She was Suspicious.

On one of her rambles in the country Queen Victoria was caught in a shower, and she entered an old woman's cottage, the inmate of which did not recognize her sovereign. "Will you lend me an umbrella?" asked the royal lady. The woman looked at her visitor in a suspicious manner, and replied: "I hae twa umbrellas, ane is good and ane is verra old. Ye may take the old one; I guess I will never see it again," and she offered the Queen a tattered article, which was quietly accepted?