



LIGHT RADIATES FROM WOOD

Curious Action of Section of Fir Tree Branch on a Photographic Plate.

A curious property of wood, whereby it is able to photograph itself in the dark, is described by Dr. William J. Russell, in a paper read before the London Royal Society, and printed in Nature. Says Dr. Russell:

"It has been shown in former papers that many substances are capable of acting on a photographic plate in the dark and producing a picture of themselves. Further investigation shows that this property belongs probably to all woods, some, however, being much more active than others.

"To obtain a picture, the wood has to be in contact with, or at a little distance above, the photographic plate, and has to remain there for times varying from half an hour to 18 hours, and to be at a temperature not higher than 55 degrees C. (131 F.).

"The wood of the conifers is very active, and gives pictures which are very definite. The illustration is a picture of a section of a branch of a Scotch fir, and shows well the rings of spring and autumn growth. It is remarkable that the former are very active, producing in this picture the dark rings, and so



PHOTO OF SECTION OF FIR TREE. (Taken in Dark by Its Own Radiation.)

with the other pictures, the part which is active in the picture is dark in the picture. The rings seen in the wood are very sharp and strongly pronounced in the picture. If the action exerted on the plate be owing to the presence of hydrogen peroxide, as has been previously suggested, no doubt it is produced by the resinous bodies present in the wood, but it is remarkable that there is no action from the dark autumn wood. Experiments described in the full paper show that resin exists in the dark rings, but apparently under such conditions that it cannot escape. Other members of the pine group have been experimented with and have been found to behave in the same way as the Scotch fir.

"With the spruces the action on the plate is not so definite and well marked; the white wood is always active, but in some cases the dark rings are also active, and the pictures are not so sharp as with the firs. Larch-wood gives a very interesting result, for the picture is the reverse of that of the Scotch fir, that is, the dark rings in the wood are the active rings and the light rings are inactive.

"With regard to woods other than conifers, oak and beech are both active and give very good pictures, so also does acacia (Robinia), Spanish chestnut, and sycamore; on the other hand, ash, elm, horse chestnut, plane are comparatively but slightly active.

"Many foreign woods are very active, but as the annual rings are often not well developed, the pictures they give are of a somewhat different character. The African blackwood, rosewood, cocobola, and many others are very active. Several of the foreign woods have a ring of white wood which is quite inactive.

"Knots in a wood generally, but not always, give a good picture. Some of the resin in immediate contact with the knot is in some cases but little active. The marked difference in properties of resins from it is shown how difficult it is to remove it so that the wood shall be no longer active. Boards that have been exposed to the air for a long time, as oak boxes 100 or more years old, rotten wood from the stump of a tree, and even bog wood have all been found to be still active.

"In certain cases the picture obtained on the plate does not resemble the markings which are visible on the wood. With some woods this more commonly occurs than with others. That this picture is persistent in the wood is shown by fresh sections giving the same result. The true bark of a wood is apparently quite without action on a photographic plate, so is the internal pith of a plant.

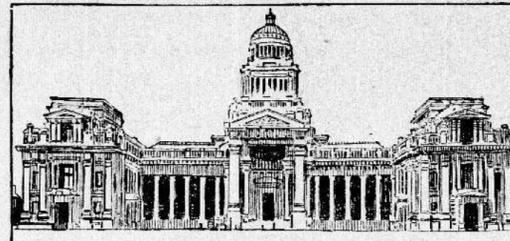
Effects of Electric Currents. The physiological effects of electric currents have been investigated by Prof. Nernst, at Bonn. The safety of the human body when exposed to powerful high-frequency electric current has been explained as due to passage of the current over the surface of the body only, but Prof. Nernst finds the reason of the current's harmlessness to be probably that it does not have time to effect a change in the cellular tissue before the reversal of the current takes place. Experiments on frogs have confirmed the new theory.

Brushes as an Advertisement. An English manufacturer of nail and hair brushes has a novel scheme for advertising his brushes. He supplies them to hotels for about the cost of manufacture, the brushes containing his advertisement on the handle. At the end of each week he takes away the brushes which have been in use and gives them a thorough sanitary cleaning, leaving another set in their place. Sometimes the advertisements of other manufacturers are placed on the handle, such as hair restoratives, etc.

Electricity Will Purify Air. When the transformation of cities by electric power and light is completed, we may expect the air to be practically as pure as that of the country. It is estimated that the carbonic acid exhaled yearly by the people of a city of 2,000,000 is about 450,000 tons, but that this is less than three per cent. of that from fuel combustion.

Rapid Transit. It takes about three seconds for a message to go from one end of the Atlantic to the other.

FRONT VIEW OF THE HAGUE ARBITRATION PALACE.



This is the building for which Andrew Carnegie has contributed \$1,500,000. The style of architecture is a duplicate of the Brussels Palace of Justice. It will cost about \$140,000 more than the sum contributed by Mr. Carnegie.

LOVERS WHO ARE UNSEEN.

Courtships Carried On Through the Mails by Means of Singular Missives.

No doubt there have been many cases where hearts have become heavy blinding the postal officials for delay in receiving letters from loved ones and where lost letters have been the means of parting lovers, yet this is in large measure offset by those instances where the post office department has assisted in uniting couples and bringing about marriage ceremonies, says the Chicago Tribune.

Here, for instance, is quite a pretty romance due entirely to a packet of flower seeds and a postage stamp. A little over a year ago Mrs. Roehr sent to one of the big Michigan nurseries for a packet of begonia seed, and the little parcel was duly delivered through the medium of the postal service. When she opened it she was much amused to find inside not only a generous supply of the minute seeds, but also three scraps of paper on which were written the name and address of a girl. One of the names was Bessie Smith.

Mrs. Roehr showed these mysterious pieces of paper to her son Fred, and he in a spirit of mischief wrote to Miss Bessie Smith, and the young woman promptly replied. The correspondence was kept up for more than a year, when the young man made the suggestion that photographs should be exchanged. Then, when Fred Roehr gazed on the features of his unseen correspondent, he thought it was about time to fix things up, and wrote by return, asking Miss Smith to marry him, and back came the answer: "Yes."

A fortnight later the wedding took place, when the bride carried a pretty bouquet of pink begonias. In memory of the circumstances under which she first made the acquaintance of her husband. It may perhaps be well to state that Miss Smith, now Mrs. Frederick Roehr, was formerly engaged in a big horticultural warehouse, making up packets of flower seeds, and it was by way of a joke that she and two other girls wrote their names on slips of paper and inserted them in a packet of begonia seed.

Perhaps the most extraordinary marriage on record is one which recently was brought about by means of the postal service and a stick of dynamite. The facts of this remarkable case have been verified, and one husband at least can truthfully state that he was sought by means of a substance which might easily have blown him to atoms.

Here is the story. Miss Lulu Lunn, a young girl of 20, was last year working in a powder factory at Greenup, Conn., at a salary the reverse of extravagant. She had no lover, and, as she considered the acquisition of one necessary to every girl's happiness, she wrote her name and address, together with a short message, on a stick of dynamite, hoping that before it blew up the silent appeal would have done its duty.

One of the workmen employed by George Jubb, a Missouri quarry owner, showed his master the stick of dynamite bearing the writing, and the Missouri man made a note of it and a little later wrote to Miss Lunn. In reply the girl stated that she was employed in a powder factory and that she was not happy, and would Mr. Jubb write to her occasionally? The courteous Missouri man cheerfully agreed to do so, and the correspondence so curiously begun lasted for many months, when one day, by arrangement, the two met. Then the acquaintance ripened into something warmer than friendship, and in the end Mr. Jubb laid his heart and quarry at the feet of Miss Lunn and was duly accepted. A month later the marriage took place.

According to the Talmud. It would appear the rabbis of southern Russia have just revived an old law of Talmud. According to this law, when a married man leaves for a war, he must grant to his wife a conditional divorce, to be put into force if he does not return within a reasonable time. All the married soldiers of Lodz have had to carry out this formula before leaving for Manchuria. Each one has left with the rabbi his name, address, age, height, and any special marks about him, and if after a certain fixed time he does not put in an appearance the wife will obtain her dispensation from the rabbi, and will have the option of marrying again as soon as she pleases.—Smith's Weekly.

Easily Pleased Then. Nell—So their engagement is off? Belle—Yes. She says he was too hard on please.

Still Insinuating. Bill—A man wouldn't expect to be cheated in church; now, would he? Jill—No, not unless he was married there.—Yonkers Statesman.

When One Falls. Surely he is a failure who dies without at some time having been referred to as "the cynosure of all eyes."—Chicago Record-Herald.

Dead Again. The last survivor of Balaklava has died again. At Denver this time. There are only a few of them left.—Indianapolis News.

Obesity Cure. From the present outlook high prices are going to serve a lot of people as an obesity cure.—Chicago News.

NEW ETIQUETTE IN TEXAS.

Code Compiled by Sheriff of El Paso County When Gambling Houses Were Closed.

A moral wave has swept over all the principal cities of Texas in the last few months and as a result gambling is a thing of the past in some of these places. It is in San Antonio and El Paso, the two remaining wide open towns of the state, that the full force of this wave has been felt, says an Austin report to the New York Sun.

In El Paso the crusade against gambling was taken up by the moral and religious element, and petitions to close the gambling houses were presented to J. H. Boone, sheriff of El Paso county, by a delegation of prominent citizens.

Sheriff Boone sent a notice to each game keeper telling him that he must go out of business on a certain day at a certain hour. He followed up these individual notices with a general proclamation which was published in the principal newspapers of El Paso as follows:

TO THE PUBLIC. Leave your pistols at home unless you have commissions to carry them. Carrying concealed weapons is in violation of the law. You might get caught and excuses will not pay the fine.

Side door entries and back way sneaks may get you into trouble. There is a strong force of men watching you.

Don't fail to post yourselves on what are the violations of the law.

The law applies to all places in El Paso county as well as in the city.

Washington park will close Saturday night and will not open until Monday morning.

Take my advice and be on the safe side. It will be too late after you are caught.

These warnings will soon cease and then we will do business strictly.

The hour for final closing was fixed at 3 a. m. All night long crowds filled every gambling place in the city. Men fought for places at the tables. Men who had never staked a dollar before in their lives sat in the games just for the sport of it.

When the hour of 3 a. m. arrived all games were stopped, doors were closed and the reign of gamblers in El Paso was at an end.

NEWEST MICROBE IS FOUND

"Tetracoccus of Acute Ascending Paralysis" Is the Wonder of Scientists.

Another subtle fog of mankind has been unmasked in the shape of the "tetracoccus of acute ascending paralysis." It was immensely admired by the French doctors during their visit to the Westminster hospital, London, recently, where some of these organisms have been cultivated from a patient suffering from this rare disease. It affects the spinal cord and the patient rapidly loses the use of every muscle in the body and the mortality is extremely high.

The patient at the Westminster hospital has been more fortunate. Within 15 days of being attacked by it he was an inert piece of clay, with the exception that he was able to move one toe. At present he is progressing favorably. At the height of the disease a hypodermic syringe was plunged into his back and from the material thus obtained the famous tetracoccus was isolated. Its existence has been known for some months to the heads of the profession, but the organism is sufficiently new to render this confirmation welcome.

It takes a multitude of extended experiments to prove satisfactorily that a certain microbe is the cause of a certain disease. The tetracoccus seen under the microscope appeared like a series of dots arranged in fours. At the Westminster hospital the identifying experiments have had to be stopped halfway toward proof. Proof is obtained when the culture reproduces the disease consistently in living animals, and the Westminster is not allowed to practice vivisection.

Head of Agrippa. A discovery of considerable importance was made in August at Suse, the ancient Segusio, in the province of Turin, Italy. At a depth of six feet or more a colossal man's head was found. It is of bronze, and is double the natural size. The head is of excellent workmanship, and is well preserved. It is supposed that the head belonged to a statue of the minister of Augustus, Marcus Vinicius Agrippa, who was the husband of Julia, daughter of Augustus. Agrippa was the grandfather of Caligula and the great-grandfather of Nero. He died in the year 12 B. C.—Chicago Daily News.

Big Profits. Immediately after the great fire in Baltimore some leading society women of the city opened lunch counter establishments to supply midday refreshments for business men until better arrangements could be made. The enterprising have paid such handsome dividends that the society women have decided to keep on, turning over to subordinate the actual work of running the eating houses.

Great Teacher. A little sorrow may teach more than many sermons.—Chicago Tribune.

"GIMLETS" BORED THEM.

Book of Concealed Author Lacked Popularity with the Reading Public.

Though Robert W. Chambers is a popular author, he will rarely talk about his books, says a literary exchange. "I hate literary conceit," he said the other day. "If an architect builds a good house, his friends, on account of it, don't regard him as a god, and he doesn't regard himself as a god. The same with an engineer, but he builds a good bridge it is in the day's work, and that is all there is about it. But if a man writes a good book, why, then there must be genius in him, and before this genius he himself, as well as all the world, must bow down. Rot.

"Literary conceit is distasteful to me," Mr. Chambers said, "I like to see it taken down. It was well taken down in the case of a New York man recently. He has written a novel, 'Gimlets,' and the public librarians have put his books on their shelves. The man called at one of the libraries to find out how his work was going with the public. He hoped to have his vanity tickled a little. 'Is 'Gimlets' in?' he said to the librarian. 'It never was out,' was the reply."

TOO GREAT A RESEMBLANCE

Portrait So Like the Original That It Lacked Charitable Expression.

Bishop Olmsted, of Denver, is interested in a number of charities, and obtains many generous contributions on their behalf from rich Episcopalians, says the New York Tribune.

There is in Denver, however, a millionaire who will rarely consent to help Bishop Olmsted's pet projects. He is a selfish man, and in his own way he assists the poor, but to organized charity, for some reason, he heartily objects. The bishop often asks him for subscriptions, but these requests are almost invariably refused.

Recently the millionaire had his portrait painted. Bishop Olmsted met him the other day and said: "I saw this morning your admirable portrait. 'And did you ask it for a subscription?' said the millionaire, and he said: 'No,' said Bishop Olmsted. 'I saw there was no use—it was so like you.'"

Caught.

Smuggler—How dare you accuse me of smuggling? Can't you see that I have an honest face?

Officer—Yes, madam; but this is a case where you're not taken at face value.

"No," said Bishop Olmsted. "I saw there was no use—it was so like you."

What to Expect.

The Teacher—What do you suppose we will do when Gabriel blows his horn, Tommie?

Tommie—Oh, I suppose we'll all jump and think it's an automobile accident. Yonkers Statesman.

Six French duelists fought one day lately, and one of them was wounded. If the dangerous element in those fierce encounters continues to expand at this shocking rate, we may expect that they will soon become unfashionable.—Washington Times.

Reads Like a Miracle.

Moravia, N. Y., Dec. 12th.—(Special)—Bordering on the miraculous is the case of Mrs. Benj. Wilson, of this place. Suffering from Sugar Diabetes, she wasted away till from weighing 150 lbs. she barely tipped the scales at 130 lbs. Dodd's Kidney Pills cured her. Speaking of her cure her husband says:

"My wife suffered everything from Sugar Diabetes. She was sick four years and doctored with two doctors, but received no benefit. She had so much pain all over her body that she could not rest day or night. The doctor said that she could not live.

"Then an advertisement led me to try Dodd's Kidney Pills and they helped her right from the first. Five boxes of them cured her. Dodd's Kidney Pills were a God-Sent remedy to us and we recommended them to all suffering from Kidney Disease.

Dodd's Kidney Pills cure all Kidney Diseases, including Bright's Disease, and all kidney aches, including Rheumatism.

Somehow one's plain duty is usually too plain to be attractive.—Chicago Daily News.

Christmas purchasers should read the advertisement of the Mermod & Jaccard Jewelry Co. of St. Louis, and write for their free catalogue. This firm is perfectly reliable. They promptly return your money if the goods don't suit you.

Have you ever noticed what a lot of second-class people travel first-class?—Chicago Tribune.

To Cure a Cold in One Day Take Exaltive Bromo Quinine Tablets. All druggists refund the money if it fails to cure. E. W. Grove's signature is on each box. 50c.

Unexpected personal prominence dims many a well-kept halo.—Judge.

Dropsy treated free by Dr. H. H. Green's Sons, of Atlanta, Ga. The greatest dropsy specialists in the world. Read their advertisement in another column of this paper.

A penny saved is a penny burned—later on.—Puck.

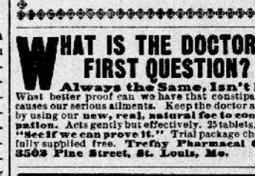
Piso's Cure for Consumption is an infallible medicine for coughs and colds.—N. W. Samuel, Ocean Grove, N. J., Feb. 17, 1900.

The empty head needs a haughty air.—Chicago Tribune.

Nothing

is so sensitive to cold as a nerve and this is the cause of

Neuralgia



St. Jacobs Oil

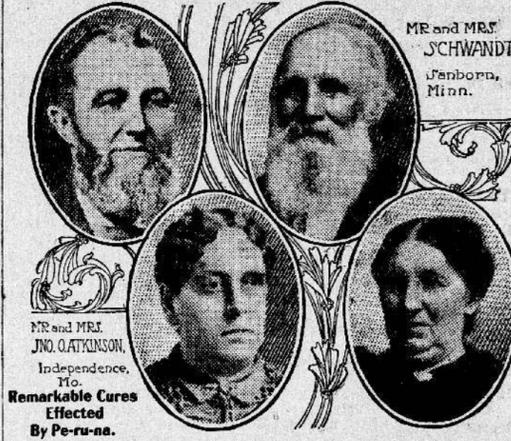
by friction and penetration warms, soothes and cures the worst cases. Price 25c. and 50c.

WHAT IS THE DOCTOR'S FIRST QUESTION?

Always the Same, Isn't it? West better proof can we have that constipation causes our serious ailments? The doctor asks by using our new, real, natural fee to constipation. Acts readily, positively, 25c. a box. See if we can prove it. Trial package cheerfully supplied free. Trophy Pharmacy Co., 2525 First Street, St. Louis, Mo.

THE OLD FOLKS AT HOME

Are Never Without Pe-ru-na in the Home for Catarrhal Diseases.



Under date of January 10, 1897, Dr. Hartman received the following letter:

"My wife has been a sufferer from a complication of diseases for the past twenty-five years. Her case has baffled the skill of some of the most noted physicians. One of her worst troubles was chronic constipation of several years' standing. She was also passing through that most critical period in the life of a woman—change of life.

"In June, 1895, I wrote to you about her case. You advised a course of Peruna and Manalin, which we at once commenced, and have to say it completely cured her.

"About the same time I wrote you about my own case of catarrh, which had been of twenty-five years' standing. At times I was almost past going. I commenced to use Peruna according to your instructions and continued its use for about a year, and it has completely cured me. Your remedies do all that you claim for them, and even more."—John O. Atkinson.

In a letter dated January 1, 1900, Mr. Atkinson says, after five years' experience with Peruna:

"I will ever continue to speak a good word for Peruna. I am still cured of catarrh."—John O. Atkinson, Independence, Mo., Box 272.

Ask your Druggist for a free Peruna Almanac for 1905.

CHRISTMAS PRESENTS! Mermod & Jaccard's fine goods—quality and price guaranteed. ORDER NOW, marking your selections with an "X." Inclose amount as per special prices quoted. Goods will be sent to you at once, charges prepaid, and if, after you have examined them, they are not entirely satisfactory, return them at our expense and your money will be refunded. SEE THESE SPECIAL VALUES: 75c, \$1.50 Pair, ONLY \$3., 25c. COST US THOUSANDS! ABSOLUTELY FREE TO YOU! WRITE FOR IT TO-DAY. MERMOD & JACCARD JEWELRY CO., St. Louis, Gentlemen: Please mail one of your new catalogues to: Name: City: State: I enclose \$... to be sent with understanding that if they are not entirely satisfactory to me they may be returned at your expense and you will refund money. MERMOD & JACCARD'S Broadway, Cor. Locust St. ST. LOUIS, MO.

FARMERS! ATTENTION! NO LINIMENT WAS EVER MADE THAT EQUALS SLOAN'S LINIMENT FOR HORSES AND OTHER STOCK AND ALL FAMILY USES. It Kills Pain and Kills Germs. DR. EARL S. SLOAN, 615 ALBANY ST. BOSTON, MA. 55.

This Washing Machine FREE To introduce the Improved Favorite Washer in every home in the U. S. I will send a machine, freight paid, to the first to write. I will send two machines. Sell one and keep the other. You don't have to act as agent in order to get MACHINE FREE. Machine washes anything that can be washed by hand, and is the lightest running machine made. Tried for 16 years. Write to-day. R. M. BALL, Mfr., Rooms 8 to 11 Ball Block, Waukegan, Ind. Reference by permission: Merchants National Bank.

DR. PISO'S CURE FOR CONSUMPTION Cured. Gives quick relief. Removes all swelling in 8 to 20 days; permanent cure in 30 to 60 days. Trial treatment free. Dr. H. H. Green's Sons, Box 2, Atlanta, Ga. A. N. K.-Y. 2052

NO MONEY TILL CURED PILES—FISTULA—27 YEARS ESTABLISHED. We need FREE and untold a 222-page treatise on PILES, FISTULA and DISEASES OF THE RECTUM. Also 100-page book on CURE FOR CONSUMPTION. Don't Cough Syrup. Tastes Good. Use with caution. Dr. H. H. Green's Sons, Box 2, Atlanta, Ga. 2052