

MAGIC OF COLORS

By It We Know of What the Sun and Stars Are Composed.

SECRETS OF THE UNIVERSE.

How They Were Revealed by the Discovery of the Spectrum and the Reasoning to Which It Led—Our Eyes Are Primitive Spectroscopes.

The miracle of the spectroscopy is repeated before our eyes every day and every night without our recognizing it. If people were more observant and more accustomed to think about the meaning of what they see great discoveries would be as plentiful as diamonds in a Kimberley pipe.

A man said to me the other day, "What is all this color that I see when I squint my eyes and look at an electric light?"

I replied: "It is the greatest revelation that man has ever had in the physical world—it is spectrum analysis. Your crowded eyelashes become an astronomical instrument and analyze the light for you into its primary colors. The multitude of narrow slits through which the light passes as you squint your eyes act like a diffraction grating and change the direction of the various waves of light in accordance with their length.

"The red waves are long, one thirty-thousandth of an inch in length, and they keep on without much change of direction, but the violet waves are short, one fifty-seven-thousandth of an inch in length, and they are considerably turned out of a straight line. All the intermediate waves, from orange, through yellow, green, blue and indigo, decrease in length and are more and more turned aside as they get shorter. The consequence is that you see through your nearly closed eyelashes a band of colors, which is nothing but the famous spectrum of the astronomers."

By the discovery of that spectrum and the reasoning that it led to we have found out what the sun and the stars are made of. Every known element of matter, when it is made to shine, gives out wave lengths peculiar to itself. Spectroscopic instruments more perfect than the eyelashes reveal these special waves in the light of the sun and the stars and by that revelation enable us to detect the incandescent clouds, composed of the hot vapors of iron, copper, nickel, platinum, carbon, calcium, sodium and many other substances which glow in the atmosphere of the heavenly bodies. We find these things in stars so far away that their light may require 1,000 years to come to us, although it flies with a speed of 186,300 miles per second.

Look around you when you enter a brilliantly lighted parlor with crystal chandeliers hanging from the ceiling. The mysterious spectrum flashes at you from a hundred directions at once. The glass crystals of the chandeliers are also spectroscopes, and they, too, separate the various colored waves, though on a somewhat different principle. They act not as diffraction gratings, but as prisms, but the effect is nearly the same. When light goes through a prism the red waves are less bent out of their course than the orange, the orange less than the yellow, the yellow less than the green, the green less than the blue, the blue less than the violet. The result is that what was white light, with all its waves intermingled, when it entered the prism, comes out in beautiful sheaves of color.

A similar effect is produced by the beveled edge of a mirror or the facets of a piece of cut glass glittering on a dinner table.

The beauty of jewels depends upon their spectroscopic powers. Every transparent substance has its own "index of refraction," which means its peculiar power of turning light waves aside. The diamond, as the king of gems, possesses this power in the highest degree. Calling the refractive index of air 1.00, that of glass is from 1.51 to 1.71, according to its density, while that of the diamond is 2.47.

This property alone furnishes a means of detecting the genuineness of a diamond. Taking advantage of its high refractive power and shaping its facets accordingly, the jeweler can vastly increase the brilliancy of a diamond by proper cutting. He can bring about internal reflections that make the stone blaze as if its atoms were all a-fire.

The shimmer of colors in an opal is due to the existence of invisibly minute fissures, which split up the light waves and scatter their hues in delicate, intermingled rainbows.

Nature has been doing these things for thousands of years in plain sight before man found out that he could use the principle on which she acted to uncover the secrets of the universe. Very likely she is giving us many other equally valuable hints which we are still too stupid to understand.—Garrett P. Soryles in Spokane Spokesman-Review.

Untrustworthy.
"I'm glad I refused that man. He's untrustworthy."
"Why do you say that?"
"He vowed he would pine away and die if I turned him down, and now look how fat he has grown."—Louisville Courier-Journal.

Life is a garden, every thought is a seed, and what we sow we reap. Watch your garden.

MAN EATERS OF AFRICA.

The Lions and Crocodiles Are in a Class by Themselves.

Man eating lions have always been fairly common in East Africa. The most noted but far from exceptional case was that of the two man eaters which for a time stopped the building of the Uganda railroad by their ravages among the workmen until they were finally shot by the engineer in charge, Mr. (afterward Colonel) Patterson. Another lion, after killing several men around a station on the railroad, carried off and ate the superintendent of the division. The latter had come down in his private car, which was run on a siding, and he sat up at a window that night to watch for the lion. But he fell asleep, and the lion climbed on the platform, entered the car by the door and carried off his would-be slayer through the window.

In the summer of 1909 a couple of man eating lions took to infesting the Masai villages on the plain ground the headwaters of the Giso Nyiro, west of Kenya, and by their ravages forced the Masai to abandon the district, and the native travel routes across it were also temporarily closed. A few weeks later I was hunting in the district. We kept the thorn hedges around our camp closed at night, with a fire burning and akaria on guard, and were not molested.

Near Machakos, a white traveler was taken out of his tent by a man eater one night a good many years ago. A gruesome feature of the incident was that on its first attempt the lion was driven off after having seized and wounded its victim. The wounds of the latter were dressed, and he was again put to bed, but soon after he had been left alone the lion again forced his way into the tent and this time carried the man off and ate him.

Every year in East Africa natives are carried off their villages or from hunting camps by man eating lions. Occasionally one hears of man eating leopards, which usually confine themselves to women and children, and there are man eating hyenas, but the true man eaters of Africa are lions and crocodiles.—Theodore Roosevelt in Scribner's Magazine.

BRITAIN FEARED NAPOLEON.

And Lamb, Who Thought Him a Fine Fellow, Fanned the Flame.

It was on Aug. 8, 1815, that "General" Bonaparte, as his English captors insisted upon calling him, was transferred from the Belleisophon to the ship Northumberland, to begin the journey to St. Helena. There was much protest in England against the transportation of the distinguished prisoner, but the government remained firm.

Official England could see nothing but danger in keeping such a dynamic force as Napoleon within its limits, and, harsh as the actions of the government seemed, the position thus taken was not without logic. Napoleon had been placed on his honor at Elba, but honor did not weigh with him when ambition was concerned.

Charles Lamb spoke for those who favored Napoleon's detention in England when he wrote to Southey: "After all, Bonaparte is a fine fellow, as my barber says, and I should not mind standing bareheaded at his table to do service to him in his fall. They should have given him Hampton court of Kensington, with a tether extending forty miles round London." Lamb whimsically suggested that if Napoleon remained in England the people might some day elect the Brunswick in his favor, and the government took the suggestion seriously.

Now that Napoleon is safely dead such a fear seems absurd, but Napoleon was then alive, and, in view of that fact, no government was slow in saying, "I should worry."—Cleveland Plain Dealer.

Devine Signal Service.

Before the decisive battle at Solferino an ingenious method of signaling on the part of the enemy was discovered by the Serbians. A cowherd was taking five cows out to pasture on a hill halfway between the two camps. He drove them about, sometimes two together, then one at a time, then three, thus conveying information to the Bulgarians as to the position and strength of the Serbian battalions.

Marvelous Resistance of Water.

If it were possible to impart to a sheet of water an inch in thickness sufficient velocity the most powerful bombshells would be immediately stopped in their flight when they came into contact with it. It would offer the same resistance as the steel armor of the most modern battleship.—London Herald Magazine.

Taking Their Turn.

"Why station a policeman behind this cash booth?"
"It is newly painted."
"He can't keep people from getting fresh paint."
"No, but he can keep 'em from getting the paint off."—Chicago City Journal.

Cause of His Anger.

"Why'd he be so bitter at the girl he was only recently engaged to?"
"Because when she sent the ring back she labeled the box 'Rings—With Care'."—Lippincott's.

Misery In Store.

"Kate says she intends to marry Mr. Plunkin to reform him."
"What is his vice?"
"He's a good deal of a miser."—Boston Transcript.

POLICE OF SPAIN

In Andalusia They Are Seen In All Their Shabby Glory.

ARSENALS ON MOVING LEGS.

They Will Put a Pistol to Your Head With the Greatest Politeness and Lead You in a Cell With Infinite Courtesy—Mines of Misinformation.

He is polite, is the Spanish policeman. There is a live and let live air about him. He possesses neither the easy and kindly dignity of the policeman of London nor the truculence of the policeman of New York, but he is very, very human. And he has the blessed gift that no other brand of policeman seems to possess of appearing to be more than an ordinary person.

True, he is armed. He is an arsenal moving on legs. But something tells you that he wouldn't really hurt a fly, if he liked.

And how I must say that he is not to be confounded with the guardia civil. The guardia civil is quite another person altogether. He is stern and austere, and he patrols country districts and lonesome mountainous places. He was used to put down the bandoleiros, those adepts in the art of swift, forceful borrowing, whose presence did so much to heighten the romance of old sunny Spain. The guardia civil killed off these gay financial artists, but now, even after his job has been finished, he still wears a cold, austere air. He is indeed not to be confounded with my friend the policeman.

The first time I met the Spanish policeman was one night in a certain town in Andalusia. Truth compels me to state that I met him in a professional way. I was indulging with others in a row when he appeared in force. I was gathered in by five of him. But how polite he was! He put his pistol to my head, or, rather, the five of them put their pistols to my head, and made me feel that I would be doing him the greatest of favors by coming with him to the police station.

The whole affair was courteous to itself. To be arrested in such a manner was to have a privilege conferred upon one. At the police station I was again treated with politeness and in the end—with a locked door.

The Spanish policeman is not too well paid. He sports not an ambassadorial salary. All he gets is 2 pesetas a day. He is therefore amenable to the friendly and constructive tip. This, I must hasten to say, however, makes him none the less a worthy and effective guardian of law and order.

He is shabby of uniform. But that is not his fault. It is the fault of a frugal government. In appearance he looks something like an English postman and an impoverished Spanish officer. But there is artistry about his shabbiness. He fits into the picture.

Very often, especially in Andalusia, he is old and rather infirm. One is often sorry for him as he bumps along with his sword trailing behind him. But he has the wisdom that goes with age. If he sees a row he looks at it with his blind eye and allows it to simmer down—a very good thing with rows.

If you ask a Spanish policeman a question he is polite to himself. But his answer will be wrong. He is a mine of misleading information. He doesn't know, indeed, what he doesn't know about the names of streets and the way to get to them and things generally would fill an encyclopedia. If you want to know anything you must not ask a Spanish policeman. Respect him, for he is of the best, but don't ask him questions.

In the nighttime he sometimes carries a lance. He is then called a sereno, presumably because he brings serenity upon troubled waters. He looks very picturesque on a clear, star lit night and makes one think of the times of old—the times one reads about in historical romances. But he is always harmless, always peaceful and ready for a friendly gossip. He is really a sereno—a serene person. His lance is merely there to round off his artistic and romantic appearance. And it is not a sharp lance. I know, for I have often felt the edge of it when the sereno courteously handed it to me for inspection. But it looks artistic when seen in the distance on a star lit night.

The policemen of Catalonia is somewhat different from the policeman of Andalusia. He is alert, purposeful and interfering. He is apt to want to know who you are and what you are and what your business may be. But Catalonia is not Spain. It is a place where the people rush about doing all manner of things. They like work, and what is worse, they like other people to work. And their policemen take after them.

No, the Catalonian policeman cannot truly be called a Spanish policeman. If you want to see the true Spanish policeman you must go down to Andalusia.

And you will like him. You will find for him the friendliest regard. You will see him ambling casually along with stooped shoulders and trailing sword. And should you have to make his acquaintance in a professional way you will find that he will deal with you as an enemy and kindly father would deal with you. If he arrests you he will arrest you in a way that won't injure your feelings. I can recommend him.—Bart Kennedy in London Star.

He conquers twice—who restrains himself in victory.—Syria.

Bandon Dry Goods Co.'s Big Sale Now On!

Latest style Suits and Coats for ladies greatly reduced

Men's Suits, \$2.50 up. :: Men's \$5 Shoes \$2.00

Men's Rainproof Overcoats \$4.50 up

Mens \$3.00 Hats 50c each and up

Best 12 1-2c and 15c Outings 9c yard

Best 12 1-2c and 15c Ginghams 9c a yard

All Underwear Reduced. All Hosiery Reduced

All Dress Goods Reduced. All Silks Reduced

All Linens Reduced. All Sweaters Reduced

All Laces Reduced. All Embroideries Reduced

All Shoes Reduced. All Raincoats Reduced

All Umbrellas Reduced. Everything in the Store Reduced.

Look in the Windows. Come in and see how low prices really are.

Bandon Dry Goods Co.

Traders Exchange.

Located on 2nd Street in the old Wooden Mill Building. The object of the TRADERS EXCHANGE is not to buy, but to act as a go-between to parties that have anything to trade or exchange or you can set a price on anything you have to sell. Leave it at the TRADERS EXCHANGE and it will be sold for you, we have plenty of floor space; we will also buy anything and everything for Sale or Trade, Farms, Stock, Real Estate, Household goods, Machinery, Merchandise, Vehicles of all kinds, Harness and Saddles, Boats, junk of all kind. Later on we will have a TRADERS EXCHANGE auction day once a month, when we would like to have Farmers and others bring in Livestock and produce of all kinds. Likely by that time we will have the merchants and business men in with us and have a general Bandon bargain day. Business will be on a 20 per cent basis. Real Estate on a 15 per cent. There is no grab to the business, you set your own prices. The TRADERS EXCHANGE gets a 10 per cent or 5 per cent commission for storage and bringing the TRADERS or Buyer and Seller together, also storage ware house. Come in and see us or drop us a card. We want to do business with the whole surrounding country. Get in and be a booster, this is going to help everybody.

Notice of Apportionment of Cost for the Improvement of Twelfth Street West in the City of Bandon, Oregon.

Notice is hereby given: That the cost of the improvement of 12th Street West in the City of Bandon, Oregon, has been apportioned and is now on file in the office of the City Recorder of said City, and those subject to examination; the whole cost of said improvement is \$339.89 and is apportioned and assessed to Local Improvement District No. 5, which district embraces all of the property on either side of said 12th Street West and abutting on the same between the East line of Kensington Avenue and the West line of the Morris Addition to Bandon, Oregon, from the marginal line of said 12th Street West back to the center of the block or blocks abutting thereon.

This notice is published in accordance with Sec. 105 of the Charter of the City of Bandon in the official paper of said city to-wit: The Bandon Recorder, the first publication on Nov. 11th, 1913, and the last on Nov. 18, 1913, and any objections to said apportionment (if any exists) wherein the same is unjust or inequitable must be filed in writing with the City Recorder of the said City within ten (10) days from the date of the last publication of this notice, which date is Nov. 18, 1913, that the same may be heard and properly adjusted by the Common Council before the passage of any ordinance assessing the cost of said improvement. Said Common Council will meet at Birmingham, Ala. F. L. Willis

suffered greatly from asthma and bronchitis. He writes: "I got no relief until I took Foley's Honey and Tar Compound. It entirely removed those choking sensations, and never failed to produce an easy and comfortable condition of the lungs."—The Orange Pharmacy.

Notice of Street Work.

Notice is hereby given that the Common Council of the City of Bandon, Coos County Oregon, deems it expedient and necessary to improve Second Street East from the east line of Grand Avenue to the west line of June Avenue, and from the east line of June Avenue to the west line of Michigan Avenue in the City of Bandon, Oregon, at the cost and expense of the owners of the lots and tracts of land included in the improvement district to be known as Local Improvement District No. 18 which district embraces all the property on either side of said Second Street East and abutting thereon between the East line of Grand Avenue and the West line of Michigan Avenue from the marginal line of said street back to the center of the blocks abutting thereon. Said improvement is to consist substantially of grading and filling building 6 ft. wide wooden sidewalks, the construction of wooden crosswalks and curbs, all of the said improvements to be built upon the established grade of said second street East and in accordance with the plans and specifications for said work as prepared by the City Engineer filed in the office of the City Recorder and there open to the inspection of all persons interested therein. The total cost of said improvement is estimated to be \$3,417.35. Any objections to said improvement (if any exists) must be filed in writing with the City Recorder on or before November 19th 1913 by the owners of two-thirds in the area of the property within the above described improvement district. This notice is given in accordance with a resolution passed by the Common Council on the 10th day of September 1913. E. B. KAUSRUD, City Recorder. First Publ. Nov. 4th 1913. Second Publ. Nov. 11th 1913.

a board of equalization to hear the assessments for the improvement of 12th Street West on the 3rd day of December, 1913, at the hour of 10 o'clock P. M. of said day. Dated at Bandon, Oregon, this 10th day of Nov., 1913. E. B. KAUSRUD, City Recorder. First Publ. Nov. 11, 1913. Last Publ. Nov. 18, 1913.