

IN FAIR MARTINIQUE

(Special Letter.)

DATHETICALLY interesting is the following letter from a correspondent who visited the island of Martinique but a few weeks before the awful event which blotted out one of the fairest spots of the earth:

Favored by bright, balmy weather, undisturbed by serious thoughts of material things and possessed of health, strength and a cheerful, care-free disposition, the dwellers of the island of Martinique pass a thoroughly enjoyable existence. Its warm, beautiful climate, charming situation and charming cities impress the traveler most favorably, while the unflinching good humor and accommodating



A French Creole.

Type of the beautiful women of pure West Indian blood whose handsome features and graceful forms make them the most attractive of the island women.

ways of the inhabitants make them pleasant companions. Indeed, the inhabitants are undoubtedly the most interesting of the island's many attractions and they have repeatedly been referred to by writers after a visit to the West Indies.

In the busiest part of the town I halted for a few moments to watch a throng of worshippers coming in from all directions, summoned by the tolling of a bell to attend vespers. It was a good-natured, gossiping, laughing, talking crowd, composed for the greater part of colored women, all of them gay and radiant in the gaudiest of calicoes and colored cotton-stuffs; there were but few meanly clad persons and not many beggars. The men were more stalwart, more active and agile in their movements than are our southern blacks. The women were more shapely and well favored, their figures lissome and by no means gross, or lacking beauty of contour or comeliness. There were all shades of color from those of pure African blood to others who, being almost white, might readily pass for swarthy French creoles of European descent.

The costumes of the women were neat and clean; their garments, of the cheapest prints or coarsest colored stuffs, were arranged with taste and carefully draped. The garment of prevailing fashion was a single loose wrapper of colored calico or flowered muslin, belted at the waist with artful and perfectly excusable care. The young women leave one arm and shoulder bare, which, being black, and thrown into strong relief by well-washed cambric, makes a pleasing study in black and white. When walk-



Types of Martinique Women. The negroes gather up one side of their skirt, fastening it at the hip, thus adding to their jaunty appearance and gaining an artistic finish for their toilet.

With a Franco-African love of personal adornment is a passion in the gratification of which she displays a reckless extravagance, as witness the immense string of beads of extraordinary size she coils around her shapely neck, to say nothing of the superfluous rings she attaches to her ears. A favorite form of adornment is composed of six golden bars, as big around and as long as the wearer's

little finger, bound together with heavy bands; these earrings look more like the barrels of a six-chambered revolver than female gew-gaws and the beholder is surprised to find that the human ear can bear the weight of so much metal. In keeping with these are brooches as large as soap dishes, lockets as large as snuff boxes, armlets, bracelets and finger rings of all patterns and degrees of inconvenience.

Little girls, maidens, matrons and ancient dames—all of them wear gorgeous bandana handkerchiefs, built upon their heads with scrupulous care in intricate folds. Many of the quadriceps are handsome, and even beautiful in their youth, and the women of pure black as well as those of mixed blood, walk with a lightness of step and a graceful freedom of motion that are very pleasant to see. This applies only to the women who go shoeless, for when a negress wears even the best fitting pair of shoes, she minces and totters and her gait becomes most awkward.

The language of the people of the island is French. The negro creoles speak a jargon hard to understand, while the whites speak French with an accent that very closely resembles the speech of the creoles of Louisiana. The word "creole" is applied to everything born in the West Indies and the creoles of the West Indies consider the name most honorable and worthy to be borne by only people of native birth.

The population of the country at the last census was about 190,000, most of them blacks or members of the remarkable mixed race which distinguishes the island. The population is many-colored, but the dominant tint is yellow. The women are remarkable for their strength and endurance. They can walk all day up and down hill, in the hot sun, carrying loads from 100 to 150 pounds on their heads. They very seldom make use of the hand to steady the load, the head being almost motionless. These women, of the cool class, carry great amounts of produce across mountain from plantation to seaport.

Nearly all the Martinique women are beautiful. This being accounted for by the admixture of Carib blood



A Black Beauty.

with that of the Europeans and blacks. Both men and women are often so perfect physically that one wishing to create a Mercury or a Venus need only to take a cast of a body without making a modification from the head to the foot.

The appearance of the island of Martinique is in striking contrast with some of the English possessions in the same vicinity, neatness and orderly management invariably marking the former. This is explained by the fact that the French colonists, whether European or creole, consider the West Indies their country and work for it alone. In the English colonies things are different. Everyone regards the colony only as a temporary lodging place and calls England home, although a few of them have ever been there.

In the Desert.
"In crossing the Colorado desert in Arizona one sees a frightful monument to the folly of a man who thought he could drive cattle across the desert with such speed that water would be unnecessary," said Mr. S. T. James of San Francisco. "More than 20,000 carcasses lie at the Pools in that desert. Thirty years ago an extensive cattleman, who was not familiar with the great desert of the southwest, thought it would be no barrier to his plan of talking cattle across it from the west into the grazing country. When the cattle reached The Pools, which are small lakes of foul alkali water, they were so crazed by thirst that they killed each other in their attempt to get at the water. The air in that country is so dry and the sun so hot that carcasses dry up instead of decomposing. As one approaches that great herd of dead animals the carcasses look as though they were poorly fed cattle. The hair has not fallen from the carcasses and they have maintained their original shape."—Washington Post.

Burns' Immortal Poems.
Burns committed his poems to memory as he composed them, and when he sat down to write he had before him no labor of composition, but only the task of writing down what he had already finished.

Genius at first is little more than a great capacity for receiving discipline.—George Eliot.

WORK OF SCIENTISTS

INVENTIONS AND DISCOVERIES OF PRACTICAL VALUE.

Steam Joint Clamp That Will Prevent Leakage—"Safety" Fire Crackers—New Mechanical Directory an Ingenious Device—Moonlight Aurora.

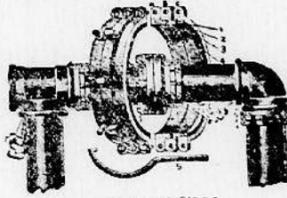
A Moonlight Aurora.

A correspondent of the London Graphic writes as follows from Winchester, Eng.: Notwithstanding a bright glibbous moon in a cloudless sky, a well marked aurora occurred this (Wednesday) evening from 9 to near 10 o'clock. The most and brightest of the beams were to the east. They did not scintillate, but merely slowly "paled their ineffectual fire" and brightened up again. One beam in particular extended through Cassiopeia delta and gamma and moved eastward; it was almost met by a thin, bright line from the south through Canis Minor, hence close to the moonlight, yet it scintillated distinctly, but soon disappeared. The air was mild and the wind southeast, yet the stars glittered brilliantly as they would in frost.

A Steam Joint Clamp.

Leakage of steam around joints in pipes is often a serious waste. The device shown herewith is intended to serve a double purpose; first, to stop this waste, and, second, to enable the operator to apply it while the plant is running without stopping for repairs.

The device is in three parts, having a general outward resemblance to each other. Each is a split clamp, which can be put around the pipe and then bolted on in place. The first is a plain clamp, which butts up against the shoulder of the pipe elbow, as shown in the cut. It is bored a little larger than the pipe, and contains a soft, pliable metal ring inside, next the pipe. The next ring has an offset, just the depth of this soft metal ring and butting against it; also a female thread which engages with an-



A Steam Joint Clamp

other thread on the outside of the third clamp. All are clamped in place. The third clamp is pressed up against the other two and held firm by set screws. Then a spanner, shown in the lower part of the cut, is used to screw up the middle clamp against the first one, setting the soft lead down hard into the leak and closing it. The pipe is then, to all intents and purposes, as "good as new."

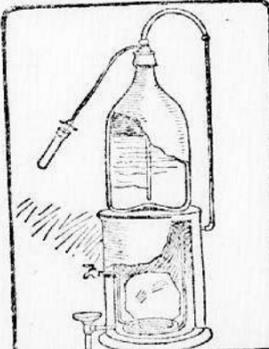
Electric Watch.

An invention which is likely to revolutionize the watchmaking industry has been perfected by a Swiss watchmaker named David Perret of Marin, near Neuchatel. It is a watch which goes by electricity, and its special feature is its accuracy. It was severely tested by experts, and it was found that it gained only seven-teenths of a second in five weeks. The expert at the observatory at Neuchatel declares the watch to be equal in precision to an expensive chronometer. The watch resembles an ordinary gentleman's lever, costing \$60, and goes for fifteen years without being rewound.

Cool and Pure Water Supply.

This invention relates to improvements in apparatus for furnishing pure water for drinking purposes, and more especially to devices by which bottled, distilled or filtered water may be cooled before being drawn for use.

In cities where the water furnished to consumers is not as palatable as it might be it is customary to purchase large bottles of special brands of water for drinking purposes and the illustration shows the cooling apparatus arranged in connection with one of these bottles as a source of supply. A special cork is provided for the bottle, with the tubes projecting from the top. One leads to the bottom of the bottle and the other connects with the air space above the water. The



APPARATUS FOR COOLING BOTTLED DRINK. Longer pipe is connected directly with a hose leading into the cooling chamber.

To start the flow from the bottle into the cooler a pump is attached to the second tube to increase the pressure inside the bottle. It will be noticed that the water flowing into the cooling chamber has no direct contact with the ice, but passes through coiled pipes arranged beneath the ice and surrounded by the water which melts from the ice. This subjects the water in the pipes to the action of the

cooling agent without mixing the two. As soon as the valve is opened the air pressure in the bottle drives the water into the cooling pipes and when the flow is once started the weight of the water below continues to draw the fluid from the bottle above as fast as the pipe beneath is emptied.

New Mechanical Directory.

The inventor who originated the mechanical directory, which is here shown, contemplates one of the most complete and convenient arrangements for finding a name that can be imagined, as the simple turning of a crank in either direction rapidly exposes page after page of names on an endless sheet of paper. The speed which it is possible to attain in the movement of the sheet permits an entire revolution in a few moments. Thus, no matter what the position of the directory, a turn of the crank will

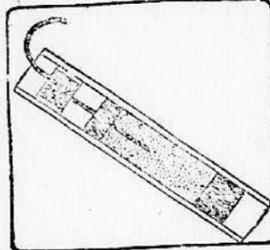


Revolving Sheet Replaces Book.

In a short time present any other part, in much less time than is required to turn the pages of a book. The chief feature of this idea, however, lies in the index arrangement, as were it not for this index, it would be necessary to slow down the revolution of the sheet to scan the names from time to time, in order to locate the desired words. This index is a narrow printed strip, whose characters pass in front of a small slot in the face of the cabinet, and the actuating mechanism is geared down to a point which makes the characters pass the slot slow enough to be easily caught by the eye, even when the sheet of names is traveling at its highest rate of speed. When the proper character is reached the corresponding section of the sheet is presented behind the glass face of the cabinet. Provision is also made for the insertion of periodical sheets of corrections and changes of address, and the machine may be so arranged as to permit the free use of the pages or as a penny-in-the-slot information bureau. This mechanism might with advantage be applied to dictionaries and other works of reference.

A "Safety" Firecracker.

The average small boy generally wants to investigate the cause of the non-explosion of a firecracker although he has a blackened face and perhaps a blinded eye to show for his cur-



GIVES WARNING BEFORE THE EXPLOSION.

osity. Antonio Delgrande of Petersburg, Va., has designed the firecracker shown in the drawing with the intention of eliminating the danger of accident from this cause. To accomplish this result the cracker is made with a preliminary alarm arrangement which, while not sufficient to injure the face or hands, explodes with enough force to frighten the child and cause it to jump back in time to escape the effect of the main explosion.

As will be seen by a glance at the picture the fuse is similar to that hitherto employed for discharging the cracker, but instead of passing directly through the packing wad into the main charge of the explosive it enters a primary division of the tube, containing a small charge of powder or illuminating compound. After passing through this compartment the fuse extends to the main explosive charge.

In one form of the safety cracker the preliminary signal takes the form of red, blue or green fire, this being especially designed for night use, when the color of the preliminary display adds not a little to the amusement of the child.

Sure of Him.

Tess—If you really love him why did you refuse him?
Jess—Goodness! You don't suppose I'd be so unaidedly as to accept him the first time.

Tess—But he declares he'll never propose to another girl as long as he lives.

Jess—Of course, I'm not "another girl."

Eugenie Styles Coming.

A dressmaker who has a vogue for originality in Paris and a fashionable clientele says that she advises her customers to have the bodices of gowns made close with long shoulder seams and with close upper sleeves. She holds to the idea that there is going to be a return of the fashions of the court of the Empress Eugenie, or that, at least, with skirts growing fuller at the hem and with large hats, the close, tight bodice is an aesthetic necessity.

LABOR NOTES

Dollar and a Daisy.

A dollar over yonder, and a daisy in the dew.

And my heart is for the daisy, but— I need the dollar, too!

For the iron age will hold Nothing dearer than its gold— A dollar is the bread of life; a daisy's kiss is cold!

II.

A dollar over yonder, and a daisy in the dew.

And my heart is for the daisy, but—th— dollar flames in view!

For the iron age will frown On a daisy in love's crown.

And laugh when love goes slinging where it tramples daisies down!

III.

A dollar over yonder, where hunger lean

And the daisy of sweet singing will now bring the famished bread!

O the iron age is bold, And a winter night is cold— The starving lips must all be fed—the lambs must find the fold!

—Atlanta Constitution.

Labor Conditions in Chicago.

The decision of the American Federation of Labor to place a permanent organizer in Chicago is regarded with great satisfaction by the unionists there. They say that never was the time so opportune as at present. The fever for organization is spreading at a rate that is satisfactory to the most sanguine. Appeals from workingmen and women to organize them are being received daily by the officers of the Chicago Federation of Labor and a list of new unions launched within the past three months shows that active work is being done by the local organizers.

Nearly fifty new unions have been organized since the fever broke out in February, a record that is not equaled in any city in the United States. The membership of the older unions has increased in proportion, and if the campaign keeps up Chicago will soon be in a position to claim a place in the front rank of the best organized cities in the country.

Although the building trades have been well organized there for several years, and on that account Chicago has been called the "hotbed" of unionism by the Building Contractors' council, yet it was behind most of the large cities throughout the country in the way of organization. It has at last awakened to a realization of its condition, and fields hitherto inaccessible are being invaded by the organizers with marked success. The number of organized workers in the city has always been greatly exaggerated, and it is extremely difficult to get anything like a correct estimate of the actual number, but it is a conservative statement to place the number brought into the fold in the past three months at 20,000.

Injunction Against Unions.

Judge Chetlain's injunction order restraining union machinists from in any manner unlawfully hindering or interfering with the business of Robert Tarrant, of Chicago, has been affirmed by the appellate court. The opinion as read by Judge Ball states:

"The law accords to capital the right lawfully to combine, to get for itself as much as it can. It accords to labor the same right. In the determination of what is best for its own protection the law must give both capital and labor a broad field for action.

"While the law recognizes the right of lawful organization and combination, it also guarantees and protects the right of every man to his own labor, the absolute right to work for any employer upon any terms he may see fit.

"On the other hand, the right of the employer to carry on his business in a lawful way, according to his own choice and judgment, to do and contract to do whatever work he sees fit, is equally well founded."

Progress of Municipal Ownership.

The "Municipal Year Book" gives some very interesting facts in regard to the prevalence of the idea of municipal ownership. It shows that of cities using electricity for street lighting one-eighth or more own their own plants. (See page 104.)

Nearly every municipality owns its sewage system and one-half own waterworks. A few cities own ferries, and a few others own conduits for underground wires, but none own commercial central heating stations.

In the north central states thirty and one-half per cent of the cities own electric light plants, while in New England, slightly less than ten per cent of the cities own such plants.

Gigantic Steam Turbines.

The Metropolitan District railway in London is about to erect the largest steam turbine plant yet in existence. There will be ten turbines, each possessing a minimum of 7,000 horse-power. The greatest steam-turbine at present has 2,000 horse-power. One of the advantages claimed for the steam-turbine for developing electric power, as compared with reciprocating steam engines, is economy of space and material. For instance, it is said that the London turbines will possess the same capacity for electrical work as do the huge generators of the new elevated railroad plant in New York, but that, whereas the New York generators are forty-two feet in diameter and require forty field magnet poles, the turbine generators have a diameter of only nine feet with but four poles. But while the New York gen-

erators revolve only seventy-five times a minute, the London generators will revolve 750 times a minute.

Machinery and Wages.

The effect of machinery on wages is well exemplified by the following figures, says Scientific American. At one time in the United States a roller in a rail mill, rolling iron or steel rails, received about fifteen cents per ton, turning out from seventy-five to 100 tons per turn. To-day, in some of the modern steel rail mills, less than one cent per ton is paid for doing the same work, and yet by the end of the year the roller in the rail mill can make as much money as he did under the old method of working. At one time forty-five cents per ton was paid for heating iron for making iron rails. To-day, through the use of improved methods, very little more than one-half cent per ton is paid for doing the same work, and yet the wages received are better than they were at that earlier time.

Source of America's Greatness.

A comparison of the value of the principal manufactures of the United States and the whole world show that we make more than one-third of the steel and pig iron; mine more than one-third of iron ore; manufacture nearly one-half of all the paper; one-fourth of the woolen cloth and one-fifth of the cotton cloth.

The United States produces 34 per cent of all the goods manufactured in the world, which is seven times as much per capita as the average for the world.

The average value of the product of one wage earner in the United States is \$1,900 a year, while in Germany it is \$450, England \$485, and in France \$600.

Work to Free Prisoner.

Another effort will be made to secure the release of E. W. Clark, who is serving a life sentence in the Thomaston, Me., penitentiary for mutiny on the high seas. President Roosevelt is said to favor a pardon, but Attorney General Knox objects. Clark is confident that he will be set free. In a letter to T. J. Elderkin, Clark says: "Oh, what a happy time that will be when I am free! Can you conceive of it? Think of freedom after twenty-seven years' imprisonment. The matter is in the hands of the officers of the American Federation of Labor."

Special Order Clothing Makers.

Robert Noren, president of the Special Order Clothing Makers' Union of America, reports an unprecedented increase in the membership of his organization since it was granted a charter by the American Federation of Labor one month ago. Eight charters have already been issued, besides a large increase in the membership of the local unions previously established. The organization has ten local unions in Chicago, with a membership of 6,000. President Noren expects to establish local unions in many of the larger cities of the United States and Canada.

The Eight-Hour Day.

Important action was taken by the House of Representatives recently by the passage of a rigid eight hour law, requiring that a special stipulation covered by severe penalties, shall be made in every contract for government work, limiting the period of labor to eight hours in each day.

Brickmakers' Unions Formed.

During the last week charters were issued from the international headquarters here for brickmakers' unions in Corning, N. Y.; Lockhaven, Pa.; and Linton, Ind.

Commerce and Industry.

In Georgia 94,083 farms are owned by negroes.

A large shipbuilding plant is to be reared at Cooper's Point in Camden, N. J.

The proportion of mules to horses in the United States is as one to seven.

Half the imports of the United States are now raw materials for manufacture.

The potato crop of the United States equals in weight the corn and wheat crops combined.

According to official reports just published the Russian government expended, in 1901, \$13,370,270 in money and foodstuffs for the relief of the famine-stricken districts affected by the last year's crop failure.

It is found that Jordan almonds, which bring the highest price in the market and which will grow in but a single province of Spain, that of Malaga, have been produced in Alameda county, California. New York city alone imports 32,000 boxes a year of them from Malaga.

The old age pensions in Denmark range from \$2.25 to \$1.50 per month for all persons who have reached their 60th year. The recipient must have good history and habits and have been ten years in the country without receiving alms. This law has proved satisfactory during twelve years.

Experiments in wireless telegraphy by the weather bureau show that salt water is the best conductor of the waves; land comes next; then fresh water and lastly sand. The methods used both in receiving and sending are entirely different from those used in any other system.