

## HOW COKE IS MADE.

### STORY OF THE LEADING INDUSTRY OF CONNELLSVILLE.

The Largest Coke Producing District in the World—Grown From Two to Twenty Thousand Ovens in Fifty Years—Enormous Amount of Water Necessary.

Some one has called coke "mineral charcoal." He meant that coke was soft coal from which the gases had been expelled by heat out of contact with air, just as wood is made into charcoal by being burned without air.

The crushed coke, which is becoming a favorite fuel with housewives and cooks, is the coke left as a residue in the making of illuminating gas. It is soft, dull black and has a pumice-like texture, but the coke which is made for foundries and blast furnaces is hard and is of a silvery gray color, almost metallic in its luster. This is the Connellsville coke, produced in the coke region of Pennsylvania, made famous by its bloody labor strikes and fatal conflicts between the "Huns" and militia. Thousands upon thousands of tons of coal are mined in the Connellsville country and burned in the thousands of ovens into coke, and when any labor trouble checks the output of this region foundries, machine shops and blast furnaces all over the country shut down. The two experimental ovens which were built in this district 53 years ago have grown into 20,000 ovens, and the few bushels of coke which the pioneers tried vainly to sell have expanded to over 5,000,000 tons yearly.

The very nature of the industry connects the coal mine and the coke oven with the closest intimacy. The ovens stretch out from the shaft top on either side of the railroad tracks, built so close together that the "bank" looks like a solid wall, pierced with low arched windows set in at short intervals. Over the bank of ovens runs a narrow gauge track, and steam and smoke cloud the perspective. The Connellsville coke region is the largest coke producing district in the world, and their cokemaking has reached its highest point toward perfection. The Connellsville ovens are what are known as the "bee hive" type, varying from 10½ feet to 12½ feet in diameter and from 6 to 8 feet in height. Each oven produces at a charge from 3 to 4½ tons of coke each 48 hours, which is the length of time required to produce coke from coal. All coal will not coke, for a noncoking coal will crumble with the heat, whereas a "coking" coal will hold its substance and become a mineral sponge when the gases are driven out.

When the coal is brought to the shaft top from the bottom of the mine, it is dumped into a chute which conveys the coal to the "larries," as the small dump cars which run on the tracks over the ovens are called. Small locomotives draw the larry wagons to the ovens in the larger plants, but in others steel cables, horses or mules are the motive power used to carry the coal to be coked. Time and labor are saved by machinery in the mine, on the shaft top and around the ovens. The mine cars brought up on the "cages" from the bottom of the shaft are pushed off the cage and an empty car run on automatically, and other forms of self dumping cages are used. The coal slides down the chute and over the screens into the bins from which the larry wagons are loaded.

When the larries reach the ovens, they are dumped, and the coal slides down. When an oven is charged, the coal is leveled down, and the door is bricked up, and all the chinks and openings are closed with loam, except a space of about two inches at the top of the door, which extends across the full width of it. The heat of the oven—for a full charge of coal is put in as soon as the charge of newly made coke has been taken out—sets fire to the coal on top. The draft and course of the air are regulated that the coal burns from "out to in," and the amount of air necessary to keep up a slow, smoldering combustion is regulated by closing or opening airways in the door. In 48 hours the coal is coked, and the door is broken open, and the glowing coke in the oven is drenched with water to cool it, so that it will not set fire to the cars, for the coke is loaded directly into the freight cars standing on the tracks before the bank of ovens.

Enormous quantities of water are used in cooling coke. As it requires about 600 gallons of water to cool one charge of coke, the Connellsville district, when all of the ovens are at work, uses up over 5,000,000 gallons of water a day, enough to supply a town of 50,000 inhabitants. Sometimes this water has to be pumped from a distance, for the mine water is strongly impregnated with sulphur, and sulphur is just what the cokemaker does not want in his product. One large coke works in this district, in order to be assured of an adequate supply of pure water, pumped it from a river 11 miles from the ovens, using an 8 inch pipe which had formerly been used for supplying a town with natural gas. The coal mined in the Connellsville district is remarkably pure and is all coked. The vein from which it is taken is nine feet thick, and the coal is mined on the "room and pillar" system. The great loss of life caused by miners using naked lamps, and so igniting the explosive gases which collect in the workings, has led many miners to adopt the electric incandescent light for the shaft bottom, pumproom and stables, and the miners are required to carry safety lamps. As the light is none too good, many miners take fearful risks by using naked lamps. The Connellsville district has been the scene of many accidents and great loss of life.—Chicago Record.

#### Surprised.

"I see," said Mrs. Wickwire, "that 2,000,000 boxes of oranges were frozen on the trees in Florida. I don't understand it."

"Don't understand it?" echoed Mr. Wickwire. "The statement is plain enough."

"Yes, but do they grow in boxes on the trees!"—Indianapolis Journal.

## HEROINE OF THE TELEGRAPH.

How a French Girl Outwitted the Germans During the War of 1870.

In the Franco-German war of 1870 the Ulmans in particular played havoc with the French wires. On arriving at a village they would ride up to the telegraph office, cut the connections and carry off the apparatus or else employ it to deceive the enemy. They were outwitted, however, on one occasion, and by a woman. Mlle. Juliette Dodu, a girl of 18, was director of the telegraph station at Pithiviers, where she lived with her mother, when the Prussians entered the town. They took possession of the station, and, turning out the two women, confined them to their dwelling on a higher floor. It happened that the wire from the office in running to the pole on the roof passed by the door of the girl's room, and she conceived the idea of tapping the Prussian messages. She had contrived to keep a telegraph instrument, and by means of a derivation from the wire was able to carry out her purpose. Important telegrams were thus obtained and secretly communicated to the subprefect of the town, who conveyed them across the Prussian lines to the French commander.

Mlle. Dodu and her mother were both arrested, and the proofs of their guilt were soon discovered. They were brought before a court martial and speedily condemned to death, but the sentence had to be confirmed by the commander of the corps d'armee, Prince Frederick Charles, who, having spoken with Mlle. Dodu on several occasions, desired her to be produced. He inquired her motive in committing so grave a breach of what are called the "laws of war." The girl replied, "Je suis Francaise" (I am a Frenchwoman).

The prince confirmed the sentence, but, happily, before it was executed the news of the armistice arrived and saved her life. In 1878 the telegraphic heroine was in charge of the postoffice at Montreuil, near Vincennes, and the 13th of August she was decorated with the legion of honor by Marshal MacMahon, president of the republic.—Philadelphia Times.

## DATE AND DISASTER.

An Old Rhyming Prophecy Which Missed Its Mark Only Once.

The old rhyming prophecy tells us that in every future year of our Lord When the sum of the figures is twenty-five Some warlike nation will draw the sword, But peaceful nations in peace will thrive.

One thousand eight hundred and eighty-eight was the fifth year of modern times in which the aggregate of the figures was 25, and it was the first in the series which extends over a period of nearly 200 years, in which the predictions of the prophet were not literally fulfilled.

In 1699 Russia, Poland and Denmark formed the alliance against Sweden, which inaugurated the great war which ended in the disastrous defeat of Charles XII at Poltava.

The year 1789 is one of the dark dates in the annals of time because of its being the year in which the French revolution broke out and raged until after the reign of terror.

The year 1798 witnessed the famous campaign of Napoleon into Egypt and the formation of the second European coalition against France.

The next date upon which the sum total of the figures in the date aggregated 25 was 1879, and in that year Great Britain's troops invaded Afghanistan, leaving behind them a monstrous trail of blood.

One thousand eight hundred and eighty-eight, the fifth in this series of combination date oddities, did not witness any formal declaration of war, but it was one of the most disastrous of modern times as far as shipwrecks, mine accident, railway disasters and general mishaps are concerned.

One thousand eight hundred and ninety-seven will be another date in which the combined figures aggregate 25, and there cannot possibly be but three others of the same kind between that time and the opening of the 2599.

## A Strange Costume.

Naval officers tell many amusing stories of Robert Louis Stevenson's life in Samoa. He was once invited to a lunch on one of the warships. He presented himself in loose, flapping trousers, above his ankles, a short white jacket and without stockings. The officers were in full regalia. But when the lunch was under way, in the brilliance of his conversation, they forgot the nondescript costume and realized the honor of his company. At his home they found the family in native costume. This on the part of Mrs. Stevenson was a Samoan Mother Hubbard, her hair down and her feet bare. Mr. Stevenson and his son wore strips of cotton cloth wound about them and short sleeved knit cotton shirts above. Mr. Osborne is very tall and thin, and his appearance in this garb was something to be remembered. But for a gentleman in town Robert Louis Stevenson would have not gone to Samoa. He had finished the cruise he had undertaken and was about to return home, when he met this English yachtman, who advised him that he had not seen the South Sea islands until he had visited Samoa. Mr. Stevenson was impressed by his account, and a visit to Samoa ended in making it his home.

## Cheer Up, Ye Men!

How fortunate it is that man's feminine censors do not leave him without hope of consolation in the future! Fallen as the big baby man is, woman—the new woman—holds out a strong hand to the child man and insists, but with infinite tenderness and pity, upon helping him up. Our feelings in return, Mrs. Grand may rest assured, will be those of unutterable regard and gratitude.

From our clubs, from the moral gutters where we lie wallowing, we will stretch forth our hands to meet those of the lady novelist and her angel helpmates. With "infinite tenderness" will we welcome their clasp, and when they have assisted us to rise and set us on our legs again—why, words fail to express the emotions we shall experience then.—Blackwood's Magazine.

## A PRINCE'S DINNER.

Description of a Formal Feast in Marlborough House.

Dinner begins at 8:15 p. m. and lasts for 1 hour and 10 minutes. Rapid service is insisted upon, yet guests will notice that four or five waiters only are allowed to enter the dining room, which is, however, some distance from the kitchen. Celerity and dispatch are obtained by the employment of a small army of assistants stationed behind the scenes, in the service room and kitchen.

If we take a peep into the kitchen, we shall find that gas is exclusively used for all culinary purposes. There is a gas grill and a roast spit, and special metal frames are fitted to the entire dishes while they are being garnished. From the kitchen leads the larder, which is exceedingly neat. The refrigerator is a large room, with ice at the top, the feed water running down the sides.

During dinner soft and low music is played. The menu cards are severely plain, with a narrow gold border and a royal crest. They are printed in French, and the courses are divided into first and second service. Turtle—genuine, of course—is put into a silver dish and a "bisque" soup in a china plate. A similar alternation is observable in the first course, a fillet of trout, garnished, being upon an oval entree dish, and soles served on a rice "souffle" upon a china plate. Guests are not expected to partake of both kinds of fish. "Cotelettes de volailles" and "chaud froit" follow, and then come the haunches of venison in large metal dishes and saddles of mutton, which are served upon silver plates. Both the lamb and venison are carved in the service room.

With these roasts vegetables are handled round in deep dishes, which stand in the center, having three divisions for "saute" potatoes, French beans and cauliflower. After the joints to each guest is handed a "sorbet" of champagne—a description of ice contained in a large glass of an exceedingly delicate shade of green. These sorbets are brought up from the kitchen by girls, and the glasses are placed upon china plates with silver spoons.—Cassell's Saturday Journal.

## TAKING A NEW START IN LIFE.

Sufferers From Stagnation Advised to Try Parting Their Hair in the Middle.

"I have taken a new start in life," says Mr. Gratebar, "and I have found it much easier than might have been imagined. My oldest daughter, who is a very bright, a very sprightly and I might add a very attractive young woman had for a long time told me that I was old fashioned and slow. She said that if I would wear pointed shoes and high collars and fashionable ties and part my hair in the middle I wouldn't be a bad looking man."

"How I looked as a result of these changes it might not be modest for me to say, but as to another and very remarkable effect proceeding from them I may testify."

"With the old blunt shoes and comfortable low collars and string neckties and with the old way of parting the hair, low down on one side, I seemed to put off an incrustation of old habits and to step up out of a deep rut, up to a level where men were hustling about in great shape, and with my pointed shoes and high collars and hair parted in the middle I was one of them, once more infused with the idea of keeping up with the procession, of keeping step to the music of active life."

"And I don't hesitate to say that it was parting the hair in the middle that did it. I could have worn unmoved the pointed toes, the high collars and the new fashioned ties, but not so the hair parted in the middle. That I felt I must live up to. It would never do for me to part my hair in the middle and then not make good my right to wear it so."

"To all middle aged sufferers from stagnation I would say, 'Try parting your hair in the middle.'—New York Sun.

## Japanese Moralizing.

An English teacher in a Japanese school discovered, by giving out subjects for composition, that the pupils had been trained to find a moral in everything, animate and inanimate. Mr. Hearn, in his "Glimpses of Unfamiliar Japan," gives a few specimens of the moral ideas evoked from the native students by subjects for English composition. One boy thus wrote on "Mosquitoes:"

"On summer nights we hear the sound of faint voices, and little things come and sting our bodies very violently. We call them ka—in English 'mosquitoes.' I think the sting is useful for us, because if we begin to sleep the ka shall come and sting us, uttering a small voice. Then we shall be brought back to study by the sting."

To another pupil was assigned the botan (Japanese peony) for a composition, and he wrote:

"The botan is large and beautiful to see, but it has a disagreeable smell. This should make us remember that what is only outwardly beautiful in human society should not attract us. To be attracted by beauty only may lead us into fearful and fatal misfortune."

## Irrigation of New England Farms.

The Irrigation Age suggests that a large proportion of the so called abandoned farms in New England might easily be made of great value by the practice of irrigation during the drought season, which is the chief cause of the crop failures and low values for these places, and also remarks, "To find an abandoned farm in the irrigated valleys of the west would be about as easy as to pick up a gold nugget on the streets of Chicago." No doubt there are many farms in Maine that could be very much improved in this way, and, if there is no available supply of water from river or lake, there are few farms where windmills could not raise all the moisture needed from springs or deep wells.—Lewiston Journal.

A Long Island girl who had been deaf and dumb for eight years had her speech restored by an electric shock, which struck the house in which she was during a storm.

# Two Unerring Signs of Returning Prosperity

## The increase in the iron output of the United States and The increase in the circulation of the Ellicott City Times.

From every section of country the word is—iron mills and steel plants starting up with an increase of wages.

From every section of the county the mails are bringing in orders for new subscribers to the **ELLCOTT CITY TIMES.**

This is owing largely to the increased size of the paper.

It is now **THE BEST** county paper in the State of Maryland. It is **Full of News Full of Enterprise Full of Energy** and riding on the top wave of popular approval.

Are you a subscriber? If not—why not? Send \$1, full name and address and we will mail you **THE TIMES** for one year.