center. And on the two others were shells decorated with landscapes—one showing forth a crooked apple-tree adrift with blossoms, against a background of trees and fleecy clouds and blue sky; the other, a tiny patch of woods in springtime, in which in one glance you might see more shades of green than you had previously imagined you could in a lifetime, the brilliant emerald of the beech mingling with the deep malachite of the cedar, both heightened by the exquisite red-and-silver of the budding oak.

It was the most exquisitely beautiful parlor any one could imagine, filled to a wondrous degree with sweet, satisfying grace. And it really did cost less than twenty dollars ; so who need be without a beautiful home, a home sending beyond it a gladdening, elevating, purifying influence? To be sure, our girl could paint, and paint skillfully, as well as contrive and embroider as few women can. But no one need be discouraged—there are ways and ways. And as to decorations, there are shells, and corals, and ferns, and autumn leaves, and Japanese articles, and Florida moss, and butterflies, and bird's-wings, and ivy,—and, oh sisters, you are rich!

## Something about Coal.

Some one says, "There are two words, each containing only four letters, but expressive of the two most valuable minerals in the world —coal and gold." And it is to the first we owe much of our comfort and happiness, and much of the world's progress in science and civilization.

Coal was known to the early Britons and their Roman masters, but it was rarely used, for timber and peat were very abundant and accessible. As late as the reign of Edward II. many objections were urged against its use, such as the contamination of the atmosphere by smoke and the spoiling of the ladies' complexion, and indeed a law was passed forbidding its use.

During the reign too of Henry VIII. fires were not allowed in the University of Oxford, and the students after their eight o'clock supper and subsequent hours' study, were permitted to take a run to warm themselves up before going to bed.

However, when wood became so scarce as to be sold by the pound, coal came into general use, spite restrictions and prejudice. And what is coal?

To the naked eye, only a black substance, neither comely in shape or color—but take a microscope and then we begin to discern its true nature and real characteristics. Like many human beings, years of external pressure have so changed it, that the beauty of early youth is visible only after long and patient search.

Geologists tell us coal is the remains of forests and floating islands chiefly made up of tree-ferns, calamites, or tree-rushes, Sigillariæ, which grew from thirty to sixty feet high, their stiff, clumsy trunks covered with long, slender, rush-like leaves, some fungi or mushrooms and Lepidodendra—the progenitors of our beautiful Lycopodiums—varying only in that in those far-away days the earth brought forth giants where are but pigmies now.

Besides the coal we use for fuel, there is a variety known under the name of Jet, found on the coast of Whitby, in Yorkshire, and known to Pliny, centuries before, by the name of Gagates, derived from the river Gagas, in Syria, near whose mouth it was found.

Cannel coal, which closely resembles jet, has a dark grayish black, or brownish black color, receives a high polish, takes fire readily, and burns without melting as other bituminous coal does, with a clear yellow flame. Like jet it is used for ornamental purposes, the writer seeing in the London Exposition, a garden seat well designed and executed, from coal taken from mines at Newcastle, and also a set of chess-men made of coal from China.

Although Providence has scattered this valuable mineral over nearly every part of the world, yet our own country is unquestionably most favored in this regard, it being estimated that the amount of workable coal in the United States is thirty-two times greater in quantity than the mines of Great Britain.

But should the mines of England ever give out, the stock of coal hidden in the heart of Belgium can be drawn upon. The coal industry of that tiny kingdom is pretty equally divided between the three provinces of Hainault, Liege, and Namur.

Happening to reside in Belgium several years ago, we had an opportunity to see for ourselves the interior of one of the most famous mines in the first-named province.

As we approached the mines, one foggy, uncomfortable morning, the roads, the houses, and even the inhabitants, became black. Between Manage and Mons, a road constantly traversed by heavily-laden wagons led us to the village and castle of Mariemont. This castle of princely magnificence stands directly upon a coal mine, as indeed does the fortune of its owner.

Our descent into the mine was preceded by a toilet, which consisted in putting on a bloomer costume of blue linen and a round leathern hat like those worn by the miners. This done, we took our lamp and were swiftly let down to the lower level of about 1,700 feet. There was nothing to frighten or fatigue us in our descent, but we must confess to a certain degree of nervous inquietude when daylight vanished and we were swallowed up in the intense darkness, a degree of darkness which we had never experienced but once before, and then in the Mammoth Cave, where our guide hid for a moment all our lamps that we might, as he said, "taste the dark."

At first sight, the interior of a coal mine has something almost infernal in it. The pictures from the sixth book of the Æneid flitted before our eyes as realities. We saw the wheel of Ixion, the rock of Sysiphus, and the Danaidae in form of young girls pouring out, not water, but coal into tubs which were being continually filled and just as continually emptied. There were human forms crouching, lying on their backs, their outlines lengthened and sharpened by the sinister lamp-light, struggling with the black ceiling which threatened every instant to crush them into nothingness, or tossing away with burning arms the débris ready to bury them. All the attitudes of suffering and expiation were combined in this picture to which night lent its weird coloring.

But after a while these classical recollections vanished, and the realities of the present took their place. Between the damned whom mythology placed in the bowels of the earth and these miners, there is the infinite distance there is between retributive service and the dignity of honest labor. Ancient poets had too much good sense and justice to make a chastisement of labor alone. It was labor without result, the very irony of strength, which mythology portrayed in its retributive, unproductive toil.

I never conceived the grandeur of man or of his works until I visited these mines. Then the realization that these immense galleries have all been opened by human strength, directed by human intelligence, made silence and darkness alike forgotten. Yet these solemn depths where the eternal silence is broken only by the roar of the coal as it falls from its bed, or the distant thunder of the ironplated wheelbarrows upon the freight ways; galleries which lead we do not know where, intersected by other galleries; dripping springs, oily and dusky ponds,—these leave the mind balancing between the poetry of fancy and the poetry of deeds. We cannot in these modern days surpass the ancients in beauty of form or grace of expression, but we are superior to them in works of utility. The ancients sung of the marvelous—we make the marvelous real.

To the miner, however, the mine is only a workshop like any other, except a trifle more gloomy. All he finds fault with is the length of the ladder by which he reaches it. Yet there was one circumstance we noticed and our guide confirmed, which was that although the workmen reached the mouth of the pit noisy and talkative, their songs ceased and their faces reflected the gloom of the place as they penetrated into its depths.

The mines of Belgium are remarkable for their number rather than their richness. At Mariemont the deepest vein is only from four to six feet thick, while in England and America there are veins from thirty to forty feet in depth. These banks of coal are embedded in masses of schist, flint, and other rock. The coal after being detached from the vein is sent to the weighing gallery. There it is placed in small, iron-plated wagons resting on iron roads. And we should not forget that it is to the working of coal mines that we are indirectly indebted for our railways. The first railroads ever made were for use in mines; they were, it is true, constructed of wood instead of iron, nevertheless it was the feeble commencement of a great idea.

This transportation of coal is accomplished by human and brute power. The first is represented by boys and girls from twelve to fourteen years of age, who push the loaded cars over the road. At Mariemont, women are not allowed in the mines, but at Charleroi, near by, they are employed in the proportion of 200 to 1,000 workmen. It was inexpressibly painful to meet these poor creatures, as we did on another occasion, silent and grave, in their grotesque garb, harnessed like beasts of burden to their dingy carts.

Brute force is chiefly represented by donkeys and Scotch ponies. The latter are especially fitted for such service, as they do not seem to suffer in the slightest degree from the deprivation of light. Some, on the contrary, who were brought there thin and scraggy, soon grew fat and flourishing. Their intelligence is remarkable too. Occasionally they grow blind, but that is no hindrance to their usefulness. Once in the mine, there they remain, except in cases of extreme illness or great age. The stables are spacious and carefully fitted up. Still we could not repress a feeling of pity for these poor creatures to whom there is neither sun nor green meadow, nor rivulet hidden under the tall grass, nor free out-of-door life where the summer breeze can play at "hide and seek" in their bushy manes.

The coal is finally carried to the upper world by steam-engines of about 150-horse power. Standing on the lower edge of the pit's mouth, a workman dexterously seizes the huge tubs called *cuffets*, as they descend, into which the contents of the small wagons maneuvered by the children are emptied. These *cuffets* rise quickly to the top of the pit, where the coal is as quickly discharged to be borne away in wheelbarrows by men, women, and children.

We had been in the mine five hours, when our guide held out his watch as a reminder that our time for staying had expired. In a place where there is no sunlight the passage of time is readily forgotten. As we ascended the shaft, little by little the pale light of day filtered through the darkness, until we emerged into the full glare of day.

It is with light as with liberty. We do not appreciate either until we have suffered from their loss! In bidding farewell to those gloomy and silent vaults, we could understand the lines with which Dante closed his "Inferno:"

"E quindi uscimmo a riveder le stelle!" though it was not to a sky studded with stars under which we emerged, but to a brilliant January sun which had the sparkle of spring in it, and which had put to flight the morning fog, while we had been hunting up the mysteries of darkness. L. P. L.

## Home-made Rugs, etc.

Rugs, quite as comfortable and almost equal in appearance to the much admired knitted Brussels rugs, may be made as follows:

Take burlaps, canvas—or coffee sacks—and from it cut a foundation the size you wish your rug. Gather up all the bits of worsted ravelings, zephyrs, shreds of merinoes, flannels, etc.—no matter what the shade of color provided it is woolen and cut the flannel or merinoes in strips as narrow as will hold together. Roll these strips up into little tufts or bunches and tack firmly to the foundation, sewing on in alternate rows until your foundation is covered.

Of course a great deal of taste may be displayed in the arrangement of the colors. The writer of this article has one that has been much admired, and that is arranged as follows: On the outer edge of the burlaps foundation I sewed a heavy fringe, made by cutting chocolate and very dark-brown flannel and "ladies" cloth in strips four inches wide, and slitting these strips horizontally at intervals of half an inch, within an inch of the edge, and gathering pretty full with a needle and thread before sewing them on. Then I made a border at least one-third the depth of the rug, of all the brightest colors I could get, fastened on in little tufts, managing to have every other tuft of some shade of green, and every now and then a *wee bit* of white or *very pale* blue.

Next I cut a large oval center-piece for my rug of newspaper, basted it carefully on the foundation covered with the bright colors the same as in the border, only with a little more white interspersed, and the intervening space between center-piece and border, which formed the background, I filled with every conceivable shade of brown that I could obtain, mixed as thoroughly as possible, so that no one shade would predominate, thereby giving it a "patchy" look, and I was much gratified at the result of my labor. This rug may be made of such materials as could be utilized for no other possible purpose, save "sell-rags."

Another way to make a pretty rug is, by taking such scraps as you may have in variety of woolen, or part woolen materials, delaines, alpacas, merinoes, etc.—the larger flowered and more "old-fashioned" the better—cut in four or five inch squares, fold three-cornered, and with needle and thread gather up in form of a shell, and sew on in alternate rows on a firm foundation. These rugs are very beautiful when made entirely of scraps of the different flowered Tycoon reps that was so much in vogue for morning wrappers or dressing-gowns a few years ago. On a deep border made of Tycoon reps, the background of grey or brown, and the center made of flowers and leaves made of tiny shells of grey colors and green, is especially pretty.

Visiting the house of a friend recently, I noticed a nice, yet simply made rug in front of her sitting-room grate that some reader might like as a model. Strips of brown and black flannel were cut in strips about four inches wide, and pinked out on one edge in large scallops. In the center of each scallop of the brown was worked a sort of large star in shaded green zephyr, and in each scallop of the black, a similar design in scarlet-shaded zephyr; the strips are then gathered *slightly* and sewed on a foundation of coffee sacking, the brown and black strips alternating, and the scalloped edges of course overlapping the plain ones.

Still *another* way to make a pretty rug is as follows:

Cut a foundation of nice burlaps the desired size; fringe to a depth of four inches on each edge, and make a deep border by sewing strips alternately, of dark-brown, deep blue, scarlet, and very *pale* blue "drag braid," the braid of each color should be one-third of an inch or more apart, the outer edge of each row buttonholed to the canvas with *pale* salmon zephyr, and the inside edge with *shaded* green.

Make an application center-piece, and fill the intervening space by working here and there in zephyr of some neutral tint, stars, geometrical figures, etc.

Bureau Covers.—Pretty bureau covers, toilet mats, etc., and almost equal both as to appearance and wear to Marseilles, can be made as follows:

Take coarse white muslin—old will do—cut in pieces five and a half inches square, cover this square with a thin layer of white wadding; in the center of this baste a smaller square, two inches each way—of piqué white cotton damassé, linen diaper, or other pretty thick white material. Have ready strips of white muslin one-half inch in width; sew one edge of this strip on to edge of the tiny square—ladies who have seen or made any of the famous "log cabin" quilts will readily understand this—turn over and baste down, cutting off the piece that projects at one end, beyond the tiny square; on the opposite side of the center-piece, sew another strip in the same manner, and then on the two remaining sides; now commence and sew another strip, commencing on the first strip you sewed on, then on the opposite side, and so on until the large square is covered. Baste down the raw edge of last row of strips, and lay aside until you have a sufficient number of blocks to make a cover of the required size; then sew the blocks together, line with thin coarse white muslin, and trim with crochet fringe.

Toilet-mats to match may be made of a single block pieced in like manner, and trimmed with white cotton crochet fringe or lace, crocheted from very fine darning cotton and *star* or serpentine braid.

Very pretty toilet sets, bureau covers, mats, splashers, etc., are made by cutting from Turkish toweling pieces of the required shape and size, and crocheting a border of lace in *shell* stitch of coral or scarlet split zephyr: for this latter, use medium size fine steel crochet needle.

## My Housekeeping Class.

(*Continued from page 433.*)

BY MRS. M. C. HUNGERFORD.

"I think," says Jennie, after a few moments of meditation, "that there's a kind of poetry about dishwashing when it's done by a person with brains."

"It takes brains to do anything in the best way," is my not very original observation.

"Of course it does," replies Jennie, "but I have always thought washing dishes a purely mechanical process, one that couldn't possibly require thought."

"And I," remarks one of the girls, "have always considered it a very unpleasant but necessary process, associated disagreeably with dirty water, greasy dishcloths, and unsavory towels."

It will be remembered that our "Housekeeping Class" is off on a housekeeping spree, as one of its members says, and we are seeing dishes washed by a mistress of the art, who, with great acrimony, proceeds to wither the last speaker.

"Greasy dishcloths!" says she, holding out the one she has been using. "There warn't any more grease on that when I began to wash up these dishes than there is on one of your fancy pocket-handkerchiefs. If a person don't know enough to keep a clean dishcloth, then they ain't fit to wash dishes or do anything else for decent Christian folks."

Then, with looks even more expressive of disgust than her words, Miss Betsey squeezes the water out of her dishcloth, rubs a little soap on it, and begins to wipe the black sides of her sink.

"Well, she'll get grease enough on it now," says Nellie Greene, in a stage whisper to Jennie.

The latter, who stands nearer to our hostess, shakes her head and says, "Not there, not there, my child," emphasizing her quotation by doubling a corner of her handkerchief over her forefinger and touching it to the sink in the wake of Miss Betsey's dishcloth, and holding it up to view, damp but dainty still.

I cannot restrain an expression of admiration at this evidence of cleanliness, and Miss Betsey looks up sharply, having seen the action, although apparently quite unobservant.

"What did you expect to find?" she says, drawing in the corners of her mouth for her kind of a smile.

"I'll tell you," says Jennie, "what you might find in our kitchen sink if you were rash enough to risk trying, and that is a pasty deposit on the sides that you might use for shoe-blacking as far as color is concerned."

"Don't your ma wash it every day?"

Jennie covers a sudden explosion of laughter by improvizing a fit of coughing which makes our hostess say austerely:

"I s'pose she had a mouthful of chawing-gum and swallowed down some of it in a mistake. It's a very bad habit, indeed."

She doesn't say whether the chewing or the swallowing is the bad habit, and Jennie begins to sputter an indignant affirmation of disgust at either practice, and an intense contempt for every kind of chewing-gum, to which Aunt Betsey in reply gives it as her opinion that,

"Gum is a sight better than chalk or slate-pencils."

I agree with her upon that point, and recall the more important subject we have strayed from by asking if acids or soda are used to bring the sink to its state of exquisite cleanliness.

"Why, no," responds Aunt Betsey, "there is no need of using anything but soap."

"Well, what would be good to get off the 'pasty deposit' that Jennie spoke of?"

"I am sure I don't know," says Aunt Betsey, with an expression of utter disgust. "I never saw a sink in that state in all my born days, and I should feel like giving up the ship if I had to undertake such a piece of work as getting one to rights."

"Oh, but really Miss Betsey," says Jennie, "I wish you would tell me about cleaning the sink. I supposed they had to be horrid and dirty always, for once when I first began to take some care of the house I asked the cook what made the sink look so nasty (that's not a pretty word, but it's what I said); she got awfully mad and said it was all plastered up with black from the pots and grease from