

"I thought so; there's an end to your flirtation with this stranger. I do not choose that my rose shall waste its perfume on all alike."

Turning abruptly to Arden, he said—

"I see Withers coming with his satellites. Let us go at once, and see if we can fathom this mystery at the old house. If our search only ends in discovering what I am so anxious to regain, I shall have cause to bless the day that sent you here to dash canvas. Excuse me, Mr. Arden, I meant no disparagement to your skill as an artist; but really your occupation seems a very humdrum way of passing one's life; for, after all that can be said, the imitations can never come up to the originals."

Arden smiled at this disparaging criticism on his art.

"No apology is necessary, I assure you. One not gifted with the power can never comprehend the exceeding great reward the artist finds in walking in the footsteps of the great Architect who has spread such exquisite loveliness over the whole earth. I would not exchange my talent, humble though it may be, for the wealth you are now so eager to claim."

Lennox regarded him incredulously, but the entrance of Withers prevented him from replying; and accompanied by quite a train of followers, who were anxious to witness the result of the examination at the cottage, the party proceeded toward it without delay.

They found the room in which Arden had slept just as he had left it, with the exception of the sketch he had that morning made, commemorating his dream of the previous night; that had disappeared, and no trace of it was to be found.

Every portion of the old building underwent the most severe scrutiny; the floors and walls were sounded in every part, in the hope of discovering the spot in which the papers of Lennox were concealed. All was in vain. The result was, that Arden felt assured of being able to occupy the place with perfect safety, provided the means of securing the house against intruders from without, were obtained.

When they again assembled in the yard, Lennox gloomily said—

"I came here in the forlorn hope that something might lead me to the hiding-place of those deeds, but now I relinquish all expectation of finding them here. You are quite welcome to the use of the ruin, Mr. Arden, as long as you choose to occupy it; but I would advise you in preference to seek lodgings in the village. Not that I share in the superstitious belief connected with the old place, but because it will be gloomy here, and may not be entirely safe."

"Many thanks. I will delay taking possession until the arrival of my cousin. In the meantime, I have promised to become the guest of Mr. Withers, and I shall avail myself of the interval to take a portrait of his daughter."

The frown, habitual to the brow of Lennox, deepened and darkened, and he bit his nether lip until blood flowed from it. Mr. Withers hastily spoke—

"You can have no serious objection, Reginald, when I assure you that the picture is intended for your sister. It has been long promised to her, and I availed myself of the first opportunity to have it painted."

Lennox seemed to struggle with and conquer some strong emotion; he at last said—

"Since it is for Sybil, let it be done; but —"

He abruptly ceased speaking, and drawing Arden aside, he hurriedly said—

"You know by this time that I care very little about the conventional rules of society; therefore you will not think it strange when I tell you that I intend to marry Miss Withers. She knows that I love her as no other one can; with all the fierceness of a nature that will not be baffled in its dearest hopes. Miserable she may make me; wretched I shall probably render her; but not the less shall she be mine—to rule, to adore, to torment, to die for, if necessary. Now trifle with her affections; seek to win them away from me, if you dare to play with the lightning that scathes, or the tiger that rends. She is a coquette by nature; she will seek to play the same game with you she has successfully played with others, but I will not permit it; paint her pretty face, but beware how you admire it; speak no word of passion to her, for she is pledged to become mine by such a tie as she dares not break."

Before Arden could reply to this singular address, the speaker broke abruptly away, and moved with rapid steps toward Glenfall.

Withers seemed pleased by his departure. He joined Arden, and apologetically said—

"Lennox is a strange, passionate creature, but

no one has a better heart. He is madly attached to my daughter, and with my consent he seeks her hand. Dora is a little wilful, as a pretty girl has a right to be, but she will marry him at last. I wish you to understand the ground you stand on, Mr. Arden, and I trust you will forbear toward this fiery-tempered youth."

Arden replied with some reserve—

"I certainly shall endeavour to prevent a misunderstanding on my account between your daughter and her lover. If Miss Withers will give me a sitting of two hours each day, for the remainder of the week, I can advance far enough on her portrait to trouble her no further."

"I see you understand. Thank you! Dora is too fond of flirting, and Lennox might think you a dangerous rival. Forewarned is forearmed, you know."

As they drew near the tavern, Arden was saluted by Mr. Higgins, who insisted that he should stop a short time with him. This he consented to do, and Withers went on to his own house, after exacting from him a promise that he would return there before the dinner hour.

A few adroit inquiries placed the young stranger in possession of the village gossip concerning Dora and her fiery lover. Miss Withers had spent two years in Philadelphia, in the same school with the sister of Lennox, and a girlish intimacy had sprung up between them.

In one of his visits to his sister, Reginald Lennox saw and loved the fair-haired village maiden. Since her return to Glenfall, he had been constant in his visits to her, and it was supposed that this devoted attention must end in a wedding. But it was asserted that the young lady appeared to feel more fear than love toward him; and her fondness for flirting was sensibly lessened during his visits to Glenfall, to revive, however, with renewed ardour when she was again free from his surveillance.

CHAPTER VIII.

THE HEIRS TO THE LENNOX ESTATE DISCOVERED.

THE week which followed his arrival at Glenfall passed very agreeably to Harry Arden. The weather was charming; the heavens wore their deepest hue; the variously-tinted trees glittered in the sun-light, and the soft air was delicious, as if wafted from the original Eden, before disease or death had been borne upon its wingless wings. It was that season of quiet calm which often precedes the whirlwind, that uproots all in its course!

The early morning hours were given to sketching, and several exquisite studies from Nature were already in progress, which, he felt assured, would increase his fame, and what was almost of equal importance to him, fill his purse at the same time; for, like most of the sons of genius, he possessed few of the gifts of fortune. The desire of every dreamer's life was also his—to visit that land halloved as the birth-place of art, made sacred by the footsteps of the great masters, and ennobled by the possession of their grandest works.

To accumulate the means necessary for an extended European tour, Arden was willing for a few years to drudge in the lowest walks of his profession, and he had already become noted for his skill in female portraiture. He could idealise an ordinary face, bring out traits concealed from careless observers, yet still preserve a striking resemblance of the original.

Until within a few months past he had looked forward to the possession of a competent inheritance; but the eccentric uncle who had educated him took umbrage at the profession he had chosen to follow, and when Mr. Carlyle's will was opened, to the surprise of their mutual friends, his elder nephew, Frederick Carlyle, was found to be the heir to his property, while the son of his only sister received from him a few hundred dollars.

Gold had been the great idol of Miles Carlyle's life—its acquisition his chief occupation; and, to his mind, there was a strong fascination in the phantom, to the pursuit of which his elder nephew had dedicated his life. Frederick Carlyle was an accomplished chemist, and he firmly believed that he could succeed in solving the problem that has deluded so many—the transmutation of the baser metals into gold.

His uncle, a practical man of the world, listened to his reasonings, became infatuated in his belief that final success must reward his labours, and he gave his hard-earned fortune to aid in the pursuit of this phantom, leaving Arden to the poverty he believed his inevitable lot in the pathway he had chosen to follow.

At first the disappointment was a keen one to the

young man, but he was noble, generous, and true-hearted; and he turned to the future before him with the confident belief that he could win for himself both fame and fortune. He was strongly attached to the cousin who had supplanted him in his uncle's favour; and the unequal division of the property they should jointly have inherited, caused no diminution of affection for him. They had been companions in boyhood, and were now fast friends in manhood.

The answer to the letter he had written to Carlyle came at last. He was charmed with Arden's description of the cottage, especially with its evil reputation, as it would ensure its entire possession to themselves, and he needed a secluded and quiet spot in which to pursue his investigations. If the place could be purchased, he wished to become its permanent possessor, and have his laboratory fitted up in the best style. The cottage could be restored, and re-furnished as a home for them both.

When Arden read this letter, he sought Lennox, who still remained in Glenfall with no other view, it seemed, than to be present at the sittings Dora and Withers gave him for the Hebe, which made rapid and satisfactory progress under his skilful hands. During those hours, the artist had satisfied himself that Dora was not attached to Lennox, though for some powerful motive she submitted to the tyrannical espionage he held over her. Their future union was often referred to by him, and although she listened with curling lip, and a defiant toss of her long curls, she did not deny the asserted betrothal, or betray any intention of receding from it.

One morning for a few moments they were left together, and Dora seized the opportunity to assure Arden that her father might urge her as much as he chose, but she would never give her hand to Lennox, unless he succeeded in establishing his right to the great English fortune. If her lover became a millionaire it might induce her to accept him, though he was jealous and overbearing to a degree that was perfectly absurd. She might bear that, however, to become the mistress of a splendid home, to bear a title perhaps, and be introduced at the court of Queen Victoria. Who knew what might not happen with so much money? and Lennox intended to live in England when his rights were once established.

(To be continued.)

CORK AND CORK-CUTTING.

EVERYBODY is familiar with that very common article—cork. Most people know it to be the produce of the cork-tree; but though, in one form or another, it comes before us every day of our lives, how few of us have inquired into its manufacture! A description of the process employed in the manufacture of cork will, we feel sure, be interesting to most of our readers.

The cork-tree is a native of some of the southern parts of France, of Spain, Portugal, Italy, Corsica, and Algeria. It exists in great abundance in the Pyrenees; and in Catalonia forms complete forests. In this last-named province it is principally cultivated for use, and from thence nearly all the cork commonly employed is exported to other parts of Europe. The cork-tree is an evergreen, of which there are two varieties—the broad-leaved and the narrow-leaved. It grows to the height of upwards of thirty feet; the bark of the trunk is rough and spongy; that of the smaller branches is smooth and grey, and is white and downy on the young shoots. The leaves are of a bright colour, oval shaped, with indented edges; the acorns which the tree bears are scarcely to be distinguished from those of the oak.

The thick, spongy bark of the trunk of the cork-tree is the cork which is commonly used for purposes of manufacture. But here we are led to inquire as to the structure of the trunk. It is divided into two distinct parts; the outer or cellular covering, and the inner or woody fibre. The outer covering consists of three parts: the external skin; the innermost layer (the *epidermis* and the *mesophloem*); and between these two the *epiphloem*, or that part in which the cork is deposited. In the cork-tree this product is far more fully developed, and attains a stronger and a firmer growth than in any other tree, although it is generally supposed to be traceable in every variety. In broken pieces, or in slender shreds, it may be noticed in the cherry and the birch; but in the cork-tree it remains firm until age has ripened it for use. Each succeeding year the spongy substance of which the cork is formed is produced in distinct layers, giving strength and solidity to the trunk. The outer layer, which covers the bark, is pushed outward as the tree advances to maturity.

and becomes cracked and gnarled. Sometimes a spontaneous separation of the bark from the wood takes place, and the cork thus thrown off is inferior to that which is artificially removed.

The regular method of proceeding is to allow the cork-tree to attain the age of fifteen or twenty years. The cork produced even at that age is not of first-rate quality, and the commercial value of the article increases as the tree advances in age. The method of removing the bark is by making two incisions down the trunk, parallel to each other. At the bottom and top of these incisions two others are made, at right angles with them. Into one of



STRIPPING THE BARK FROM THE CORK TREES.

porous than the first, may be removed. The operation is usually conducted between July and September. This may be called the season of cork harvest.

The crop having been gathered, the cork is placed in carts, or on the backs of mules, and removed from the forest. It is then stacked, in square masses, in some dry place, in the immediate neighbourhood of the manufactory. In this condition it is allowed to remain for ten or twelve weeks, and, in drying, loses about one-fifth of its weight.

When the cork is required for use, it is usually soaked in water, to soften the outer bark, which is subsequently strip-



STACKING THE CORK-WOOD.



BOILING THE CORK.

the latter the blade of a sharp instrument is introduced, and the cut portion gently raised up and separated from the tree. The first piece having been removed, the operation is simple and easy, in consequence of the gum or sap of the tree flowing between the bark and the woody fibre. The process of stripping the tree is gradually continued, until the whole of the bark is peeled off. A reproduction of the bark immediately commences; from the pores of the wood, the sap, or gum, already mentioned, exudes, and in the course of eight or ten years, an entirely new coating of bark, more elastic and less



CUTTING THE CORK.

ped off. After this preliminary operation, the pieces are flung into a cauldron of boiling water, and allowed to remain there for fifteen or twenty minutes. Boiling the cork renders it softer, more elastic, and easier to cut by the knife of the workman. The knife employed is broad, thin, and sharp; and with this instrument alone the skilled workman cuts up oblong blocks of cork into sizes and shapes more convenient for after use. The form into which they are cut is generally octagonal, and the refuse cuttings are sold, chiefly for the manufacture of Spanish black.

(To be continued.)

CORK AND CORK-CUTTING.

(Concluded from page 296.)

The cork wood having been cut up into pieces, is ready either for importation or for home manufacture. Corks for bottles are cut lengthwise of the bark, in long four-sided pieces, the breadth varying according to the thickness of the bark; consequently, the pores lie horizontal, and are much better adapted to keep out the air than bungs or very large corks which are cut in an opposite direction. In the quality of the cork wood there is very considerable difference, some of it being of a far superior character to the rest. The best descriptions of Spanish cork are produced in Catalonia, the inferior wood being imported from Andalusia and Estramadura. Cork of very good quality is also grown in the southern parts of France, Algeria, &c.

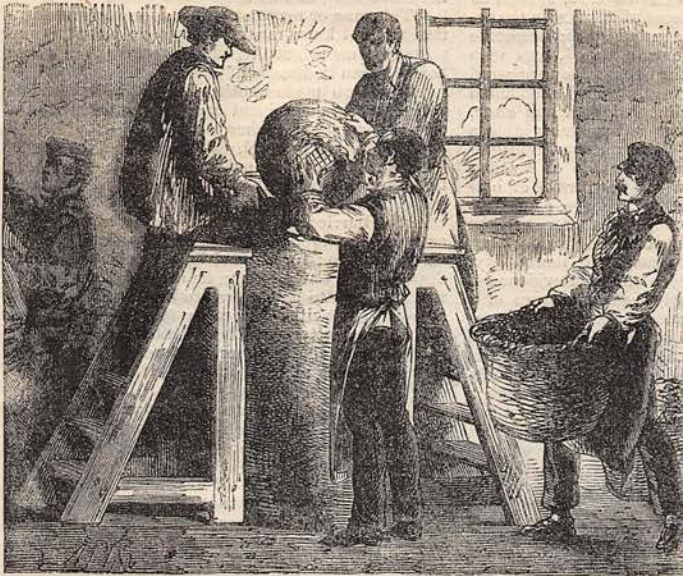
The oblong blocks of cork



ROUNDING CORKS.

portation, the corks are made up into large bales. A certain quantity having been measured into each bale, is pressed down by means of a rammer made for that purpose; after which, the bale being closed at the opening, the corks are beaten into as small a space as possible, and the package finally made up. Our artist has given us three sketches of the packing process—a process which requires considerable care and long practice efficiently to perform.

Cork is applied to a great variety of purposes. It is not necessary to enumerate all these. Its elasticity renders it especially useful for stopping vessels of different kinds; and it seems to have been used by the ancients much in the same way as it is in the present time. But besides being used extensively in the bottling trade, it is turned to many useful pur-



MEASURING THE CORK INTO BALES.



PACKING THE BALES.

are subsequently reduced by the workmen into octagons, by cutting off the four edges; thus squared for rounding, they are easily completed in any form which may be required. A few strokes by an expert hand is sufficient for this purpose. Corks are very frequently imported ready made, and a large quantity of cork wood is sent to us partially reduced to the intended form and size.

Before cutting into shape, the corks are again thrown into the boiler and then softened and prepared for the greater convenience of the workmen; they are submitted to the process of rounding—of this we give an illustration. The waste occasioned by turning the cork is necessarily great—no less than seventy-five per cent. on the raw material. After rounding, the corks are examined as to their good quality, all the badly turned or broken corks being thrown out. When intended for ex-



MAKING UP THE BALES.

poses. The Egyptians are said to have employed the cork wood to form coffins for the dead; we make jackets of it to save the living from drowning, and with the same humane design use it largely in the construction of many of our life-boats. The specific gravity of cork is four times lighter than water; it is therefore admirably adapted for boats that have to live in all sorts of rough weather. Of course the boats are not entirely built of cork wood, but enough of it is used to give them the requisite buoyancy. Cork is also sometimes placed between the soles of boots to keep out the damp; and many of the houses in Spain have their walls lined with it for a similar purpose. Cushions for billiard-tables have been made from it on account of its elastic quality; and for its lightness it is extensively used in the manufacture of artificial limbs,