THE COFFEE GARDENS OF ARABIA.

Coffee is still cultivated in "Araby the blest," the coffee gardens there being on terraces which reach an elevation of about 3,000 feet. The soil is kept moist by means of smal artificial canals, which are made to irrigate the whole by the water falling from the upper to the lower terraces. The trees here are planted so close together that the thick foliage shelters their roots from the tropical heat of the sun.

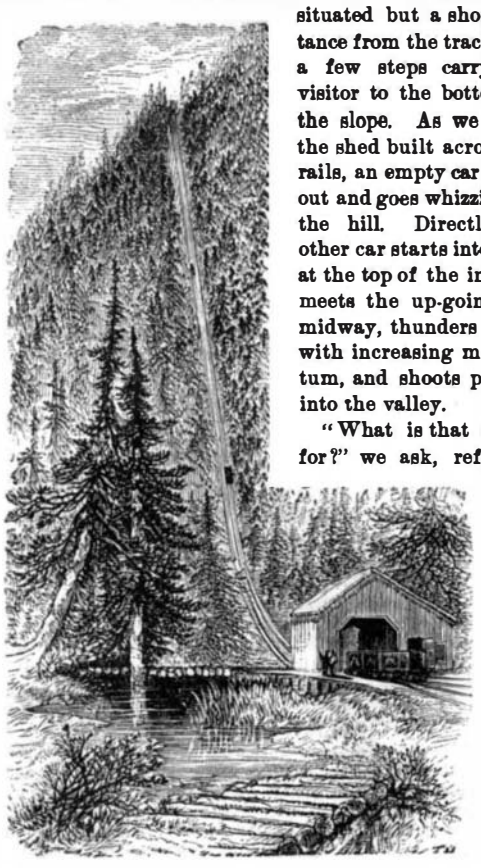
Our engraving represents the famous coffee hills of Yemen, in Arabia, where Niebuhr states the berry was first cultivated after it was brought from Abyssinia by the Arabs, and where the ripened fruit, it is said, has a flavor and fragrance which it is impossible to transplant. For ages before its use among the western nations, coffee was raised on these hills. The fruit begins to ripen in February; and when the seeds are prepared, they are conveyed to the city of Beit al Fakih, where part goes to Mocha and the rest to European markets.

THE COFFEE GARDENS OF ARABIA.

It has been computed that the annual consumption of coffee is 1,000,000,000 pounds: and that, with the exception of bread, sugar, and tea, there is no product of more general consumption than this invaluable bean. When we consider how universally coffee is used as an article of diet throughout Turkey, Egypt, Arabia, Persia, and parts of India, besides the more moderate but equally general consumption in Europe and America, we shall find it difficult to overrate its importance, as vast multitudes of persons are engaged in its cultivation, transportation, and preparation for use in many quarters of the globe.

THE RALSTON INCLINED RAILWAY.

At the head of the Lycoming Creek valley, near Ralston, in Pennsylvania, is the inclined railway to the McIntyre coal mines, which serves to carry the coal from the pits to the railroad at the foot of the mountain. The lower terminus is situated but a short distance from the track, and a few steps carry the visitor to the bottom of the slope. As we enter the shed built across the rails, an empty car starts out and goes whizzing up the hill. Directly another car starts into view at the top of the incline, meets the up-going car midway, thunders down with increasing momentum, and shoots past us into the valley.



"What is that cavity for?" we ask, referring to a depression under the track inside the shed. The starter informs us that it is where the bumper goes in to let the car pass on, and just then, an empty car being hauled up from the siding, he pulls a signal wire communicating with the other end of the road. The stout wire cable in the middle of the track begins to move, and a heavy wedge-shaped mass of timber comes up from the cavity, broad end first, strikes the car with a shock that sends it some feet up the slope, and stops it on its return. It saves the trouble of hooking and unhooking the cable, we are told, and is much safer. When it arrives at the bottom of the slope, a spring changes the gage of the wheels; it then runs along a narrow track into the hole, and the car passes over.

At the invitation of the starter, we enter the empty car. The signal is given, and before our equilibrium is recovered from the jerk that nearly upsets us, we are rushing up the slope. The cable sliding over the rollers produces a whirring sound that makes our fierce motion seem all the fiercer, while the steepness of the descent and the absence of visible motive power combine to highten the effect of the ride. The mountain seems to grow beneath and above us, as the valley expands and deepens below. We stop on the verge to look down a thousand feet beneath; and then, jumping into a loaded car which comes swiftly by, we begin the descent. The speed is great, but there is no fear-inspiring rush, no blur of objects hurtling past. We look out into the valley; it rises slowly as we descend, and that is all. Not until we shoot through the shed and out upon the level, do we realize that our motion has been particularly rapid or peculiar.

THE BRIDAL VEIL, HAVANA GLEN, N. Y.

There are no portions of the country which offer greater attraction to the lover of the beautiful and the picturesque than the so called "glens," situate near the towns of Watkins and Havana, at the head of Seneca Lake, in New York State. These natural formations are cañons eroded from the rock by the action of water, and form a succession of ravines and gorges which, from their great extent, produce scenes of remarkable variety and grandeur. At times the bare cliffs give place to thickly wooded escarpments; vegetation creeps down into the gorge and throws a network of beauty and grace, festooning the sides of precipitous rock.

Our engraving represents one of the most interesting spots in the Havana glen, from a point where the strange geological formation is best apparent. The rock is moderately shaly, and has a strongly marked system of rectangular joints, dividing the cliffs into square towers and buttresses. When a portion of the precipice falls, it does not leave a jagged face but a mural surface, as smooth and even as a well built wall, giving the sides of the cañon an appearance of grand simplicity. The eroding current follows the lines of division, zigzagging at right angles rather than curving after the fashion of ordinary streams.

It seems hardly credible that such a vast gorge as that represented could be cut by the slender stream which showers a mist of spray, like the film of a bridal veil, over its cliffs. But there is no sign of fissure at the bottom of the glen, and a deep pond is there, which must, at some time, have been beneath high falls, the constant action of which hewed for it a basin in the rock. This pool begins at the foreground of our engraving, from which an idea may be obtained of the great ravine which the constant abrasion of the cascade—continuing perhaps for ages—has gradually worn away. The record of its work is but faint, for the frost has destroyed the water marks by breaking up the shale; and although the solid rock above would retain the imprint, the fragments at the bottom of the gorge show that it eventually becomes undermined and, toppling over, buries the marks out of sight.

THE HIXSON BEEHIVE.

Our engraving represents a new form of hive which, it is claimed, combines improved arrangements for permitting the examination of the bees and comb frames, and also for utilizing the animal heat of the insects for warming the honey and boxes. The construction is such that the objectionable space between the frames and sides of the hive,

which in winter affords passage for currents of cold air and in summer becomes choked with wax, is avoided.

The parts of the floor, A, are at right angles, and incline upon and from the center. In the removable sides, B, are openings, one of which is shown closed by the door, C. The side, D, and that facing it are composed of narrow vertical boards, E, all of which, with the exception of the middle one, are detachable. Each board is as wide as the distance from center to center of the comb frames, F, and is provided with a rib, G, on the inside, to fit into the space between said frames. By this means, a side is obtained which, while sufficiently light, is readily removable, piece by piece, when it is desired to inspect the interior of the hive. The sides are held together by the cap, H, and bars, I; and the boards, E, are further secured by metal plates arranged in their upper extremities, not shown in the illustration. The comb frames, F, conform in shape to the angle of the floor, slightly above which they are supported by stud pins. By similar means they are separated from each other, the interstices thus formed giving access to the bees. J is the honey board, receiving the square honey box, K, within the space occupied by the bees, so that it will be warmed in cold weather