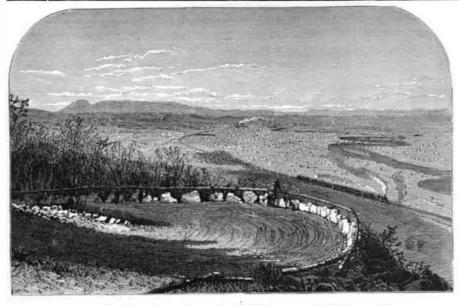
Scientific American.



VIEW FROM INDIAN HEAD, LOOKING TOWARD "SLEEPING GIANT."

EAST ROCK PARK, NEW HAVEN. BY H. C. HOVEY.

A park once meant a royal or manorial inclosure, kept in W. Bishop, donated 50 acres for park purposes. Yale Colits natural state for the preservation of game. It was for lege also gave about 23 acres, and other parties gave smaller the aristocracy; and the common people had access, if at all, only by favor or by stealth. Ramparts and castles were not in harmony with pleasure grounds for peasants. The maxim was that "the common law does not encourage matter of pleasure, which brings no profit to the Commonwealth." Hyde Park was opened for overcrowded London by Charles I. about two hundred and fifty years ago, and the act was not imitated for a long period. Paris, with gay promenades, avenues, and gardens, had no real park of its own until, in 1852, the famous Bois de Boulogne, was changed from a royal hunting ground to a play-ground, and passed from the crown to the people. Parks have now multiplied on the Continent, and are among the most striking objects to which the tourist's attention is directed.

The early American colonists met nature daily in her wildest moods, yet showed their wisdom by laying out a green in every village and preserving public squares in the cities, the finest example being the Boston Common. At a later day there was rivalry as to ornamental cemeteries. Mount Auburn was consecrated in 1831; and then came Laurel Hill, Greenwood, and many another tasteful spot made attractive, aside from sacred associations. People visited these places for fresh air, and to see the grass and flowers, so unlike the walls of brick and stone amid which they daily lived. Gradually, however, the green mounds multiplied, monumental stones glistened at every turn, and the environment became better fitted for serious meditation than for lighthearted recreation.

Meanwhile the cities grew in size, the country seemed further off, its wildness was shorn away in the interests of manufacture and agriculture, public squares were only breathing holes, and cemeteries but poor play-grounds; and then, about thirty years ago, the people began to cry out for parks-a cry, it has been said, that is "a protest against civilization itself; the voice of the natural man refusing to be made into an artificial being." The answer to this popular demand may be seen in Central Park, in New York; Fairmount, in Philadelphia; Druid Park, in Baltimore; Eden Park, in Cincinnati, and many other places of public pleasure near the large cities, both at the East and at the West; and, grandest of all, the vast National Parks of the Yosemite, Mariposa, and Yellowstone.

The fact that the more busy people are, the more they feel lots. Individuals subscribed money to purchase the remainthe need of pleasant places to be idle in, has been nowhere more strongly exhibited than lately in Connecticut-that busy hive of manifold industries. Several causes have contributed, during the last decade, to promote rural improvement.

"How to Beautify and Build Up our Country Towns," was the title of a chapter in Secretary Northrop's report for 1869, followed by appeals for tree planting, systematic forestry, and the adornment of spots rich in natural charms or in historical associations.

Governor Hubbard called attention to the same subject in | ble from Orange street and an annual message, taking as his text the gift to the town of Haddam, by members of the Field family, in 1878, of two tains groves, lawns, and extensive tracts of land laid out in walks and drives by Mr. | meadows, and is intersect-Olmsted, the landscape gardener. At about the same time ed by Mill River, flowing Roseland Park, in Woodstock, was planned by Mr. H. C. Bowen, whose aim it is to open to the public, in 1884, sixty to the bay. The acreage acres arranged in the most tasteful order possible. More suitable for use might be than fifty associations for rural improvement have been formed in the State, with marked and admirable results. New Haven has long been proud of its handsome Green, laid out in 1638, as well as of other squares, and of the magnificent elms lining all its streets and gaining for it the name of the Elm City. The people thus favored were slow in day, sweeps over a conwaking up to the need of any extended park. When, at last, they did so, several plans had advocates; a favorite one being for a sea-side park, similar to the beautiful one at ready exists entirely Bridgeport. After numerous petitions, hearings, and delibe- around the park, making rations the East Rock Park was established, the charter a circuit of about four being secured from the legislature early in 1880. When the miles. Fair country roads plans of the commissioners are completed the natural features enter the precincts from of this truly remarkable locality being improved by art, no the Hamden side. A brithan this.

The first year has been tling boundaries and endeavoring to get a title to the lands they include. The entire park, by official survey, covers an area of 370 acres, 140 of which are within the city limits. while 230 lie in the town of Hamden. The shape is quite irregular, as may be seen from the accompanying diagram copied from the map just made by the city engineer. Its extreme length is 7,000 feet, and its greatest breadth is about 4,000 feet. A search of the records showed these lands

to be owned by 12 different parties, few of whom, however, had erected buildings. One of the land owners, Mr. John



VIEW FROM INDIAN HEAD, LOOKING TOWARD NEW HAVEN.

der, and the city has appropriated \$30,000 to the same object, besides pledging an annual appropriation of \$6,000 for improvements. Thus by gift or by purchase the city now owns nearly one-half of the 370

acres that are to be secured. The remainder will be had in due time.

The park can be entered from several points. The western portion is accessi-Whitney avenue. It con-

city will have more de- dle path from the north leads out of the old Hartford turnlightful surroundings pike, over grassy knolls, and then up through the bushes to the edge of the cliff overlooking Lake Whitney, and commanding a wide and delightful view. This is Whitney Peak, mainly occupied in set- 300 feet above the sea, and wooded to its crest. It is one of four distinct peaks of the East Rock Range included within the park limits. The wilder portions of these hills have been seen by few of the 60,000 people living in the adjacent city; and when, in a recent lecture before the Sheffield Scientific School in New Haven, Professor S. E. Baldwin told the public what he had found in his rambles amid the rocks and glens, and his rough scrambles through laurel thickets, the story seemed as novel to most of his hearers as if he had

been describing scenes in a foreign land! Snake Rock, the southern spur of the range, is easily climbed, being only 200 feet high, and having a wagon road nearly to the top. It would be regarded as a fine eminence were not others near that are so much more interesting.

The commissioners built a road last summer leading from "Bishop's Gate," on State street, to the summit of the next peak, called Indian Head, at a cost of \$2,600; and the constant stream of visitors has amply justified the outlay. The ascent is by an easy grade-6 feet in 100-and where the road runs along steep declivities safety walls are built, and every precaution has been taken to guard against mishaps. Vistas have been opened through the forest at favorable points, each affording a different outlook on the meadows, rivers, valleys, and villages. Just before reaching the summit the road suddenly turns with a bold sweep, as represented by the artist, bringing before the spectator, in one wide panorama, the diversified scenes of which he has had only glimpses while making the ascent. Mount Carmel reposes on the north, 760 feet high, and slopes away in a long ridge, called, from a local fancy, "The Sleeping Giant," and the Hanging Hills of Meriden bound the horizon in another direction. The red brickyards and white steeples of North Haven are visible on the left; while on the right the pretty village of Montowese nestles at the foot of Peter's Rock. Farms, market gardens, and pleasant cottages are in the foreground; and beyond them the silvery Quinnipiac winds its way amid the countless haystacks of the Hamden meadows.

Indian Head is crowned by a natural grove of great beauty, which represents the chieftain's scalp lock. Between this and the precipitous brow of the hill is a fine esplanade, from which incumbrances have been cleared away. Immediately before us are the singular "ox-bows" of Mill River, cut from the meadows as it meanders under bridges, and amid warehouses and wharves to the broad harbor with its forest of masts.

On the left, beyond Snake Rock, appear the shining shell roads and embowered homes of Fair Haven, and along the farther shore of the Quinnipiac rise the Fair Haven Heights, crowned by elegant mansions, the finest of them built by retired oyster merchants. From no point does one get a better bird's eye view of the entire configuration of East Rock Park than from the crest of these heights. These attractive suburbs have lately been annexed to New Haven. The older portion of the city, with its stately buildings, its churches, and its college of world-wide fame, its long rows of shadowing elms, its factories and network of railways, may be seen on the right; while beyond are the villas around Savin Rock-that delightful seaside resort! And from these charming shores the blue water stretches away to the gray coast of Long Island, easily discernible on any fair day.

Indian Head, which is 310 feet high, is separated by a leep valley from East Rock, 350 feet above the sea, and the oftiest peak of the range. Next summer a road is to be constructed leading down into this valley by a circuitous way; but till that is done the prudent visitor will prefer to descend as he came, and approach East Rock either by View Street or by the wooden bridge near Cold Springs, leading from Orange Street. The rugged face of the huge rock shows to advantage from almost any point of view; but the loca-



from Lake Whitney down greatly increased by a system of dikes, or other means of drying the salt meadows. As matters now are, the tide, twice a siderable part of them. A good driveway al-

EAST ROCK--VIEW FROM ORANGE STREET BRIDGE,

tion here selected for a sketch is in the vicinity of this old bridge. The base of the hill is concealed by a talus of débris, above which rises the colonnade of basaltic pillars, leaning the record. She sailed from Queenstown eight minutes beat an angle of 23°, and reminding one of the Palisades of the Hudson, to which they are geologically related.

An old road winds up through the gorge to a quarry, whence for many years materials have been obtained for the daily distances were 428, 408, 419, 403, 423, 410, and 381 foundations of most of the houses in the city, as well as for the Belgian and Telford pavements laid along the principal streets. Leaving the heaps of stone and shanties of the quarrymen, the road leads up to the summit, where stands "Stewart's Castle," the uncouth residence of the eccentric individual who still owns the Rock, guarding it by dog and gun, and only permitting the curious who may intrude upon his domain to look from the brink of the tall cliff on the payment of ten cents. The fee is small, and the view is beyond question the finest in the State; but the conditions spoil it for any except the most philosophical minds. The proprietor refuses to sell, saying that \$100,000 would be no inducement to him to part with his acres, productive only in sprouts and paving stones; adding that if the commissioners condemn his lands he will defend his rights by the ablest legal counsel to be had in the country. The public are impatient to enjoy the unrivaled scenery, and willing to pay a fair price for the place; and the owner may hear some thing about the right of eminent domain before the year is over. Absurd as it may be, the man is actually building a steamboat on his premises; "having never read," as a commissioner remarks, " of Robinson Crusoe and his dug-out !"

These bold rocks, rising aloft from tide level, have served as landmarks ever since the Dutch adventurers coasted along hither from the New Netherlands, nearly 250 years ago. They called the locality "Red Mount," from the ruddy face of the rocks, and the name, in the modified form of Red Rock, still adheres to a bluff at the head of the harbor, at whose base a marine railway now lies where in colonial times the seals were wont to play.

An unsuccessful attempt was made, at a later day, to change the name of East Rock to "Sassacus," in honor of the Indian chieftain of that ilk, and to call West Rock "Regicide," in memory of the illustrious fugitives who long dwelt there in the "Judges' Cave." Professor Baldwin finds these names in Hillhouse's dramas:

> "See! how the guardian giants tower, Changing their aspects with the hour! There Sassacus in shade or glow, Hot with the noon or white with snow, Dark in the dawn, at evening red, Or rolling vapors round his head. In the soft West, as day declines, The Regicide, his rival, shines; Whose noble outline on the sky, Draws and detains th' enamored eye."

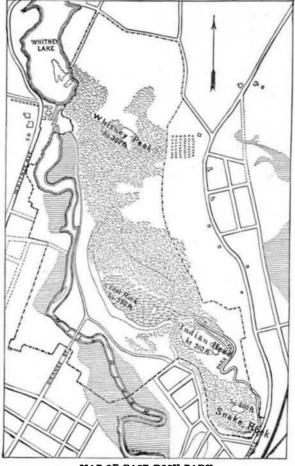
Seated on any peak in East Rock Park, on a summer's day, one may enjoy not only poetic but geologic musings, as he regards the jutting caps and proud cliffs, the meadows and the mountains. By the aid of a glass Mount Holyoke, 82 for cooling the upper apartments, and for ventilating the miles distant, may be seen ; and we learn, from Professor cellar or lower portion. Dana, that all the region between was once covered by the | The invention consists in a novel arrangement of perforated next the lath and plaster by means of a partition, the flue

estuary of the Connecticut, whose main stream was afterward diverted to another channel, leaving only the Quinnipiac as its representative. This change was due to the ancient eruptions that left as relics these long ridges of trap, from 100 to 1,200 feet high, skirted by sandstone walls, hardened or crumbled, as the case may be, by the intense heat to which they were once exposed. The surface is scored by glacier marks, even to the tops of the highest hills, showing that the entire region was wrapped in a glacier blanket. When this came to be removed it was changed into a plow that strewed the valleys with bowlders and excavated basins, one of which, Lake Saltonstall, is 107 feet deep, though its surface is but 10 feet above the level of the adjacent Sound! Other basins are now filled to the brim with peat that has been pierced in places for 65 feet without striking the bottom.

At one time the region was lifted as much as 200 feet above its present level: and then great river beds were cut in what is now the floor of the Sound, emptying mighty volumes of fresh water into the Atlantic through two mouths, one at the Race and the other in Peconic Bay. The charts of the United States Coast Survey will enable one to trace, by the soundings, the course of those ancient rivers; and artesian wells, sunk in their channel, bring from below the brine an abundant supply of fresh water which is in daily use! An elevation of 50 feet would sever the eastern portion of the Sound from the western; one of 100 feet would lay bare four-fifths of its bed; and one of 200 would dry it up all the way from Greenwich to New London. These facts explain how it happens that massive bowlders, like those of 1,000 tons weight that form the Judges' Cave on West Rock, also lie along the sandhills of Long Island; and they hint at the possibility that famous island may become again what it formerly was, the southern shore of New England.

A Still Quicker Atlantic Passage.

The steamer Alaska, of the Guion line, has again beaten fore twelve on the morning of May 14, and passed Sandy Hook bar at 11:40 A.M., May 21. Allowing for difference of time, the voyage occupied 7 days 4 hours 12 minutes. The miles. On May 2 the Alaska completed the run to Queens-

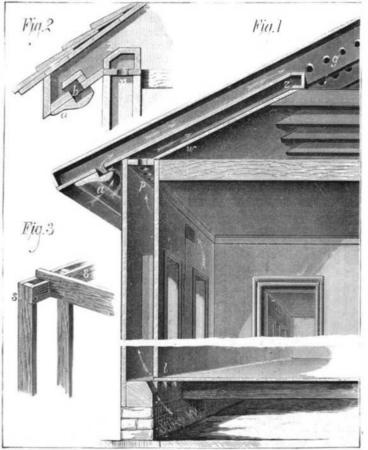


MAP OF EAST ROCK PARK.

town in 7 days and 26 minutes after leaving Sandy Hook. This was the fastest time ever made in crossing the ocean. but is so no longer. On the return trip the Alaska reached Fastnet (June 6) in 6 days 19 hours and 25 minutes from "best" eastward passage to the same point.

NEW VENTILATING SYSTEM.

We give an engraving of an improvement in the construction of buildings for the purpose of ventilation and for pre-



In the accompanying engraving a is the plancher or under part of the cornice of the roof of a house. This projecting portion of the roof is built hollow, and the plancher is perforated around the entire building with holes or slots, b; or the plancher may be made of two boards laid side by side, with an aperture or space between them. The aperture or perforations are usually screened from view and shielded from the driving snow by means of a moulding having the upper rear corner rabbeted, thereby giving an L-shaped termination to the opening in the plancher. Through this aperture cold air is let into the upper part of the house, under the roof, along the under side of the eaves.

To obtain an outlet for the heated air and cause a good current, the outer or end rafters are perforated with slots or holes, g, which let the current of heated air enter the end or gable cornice, whence it finds exit at the peak through the holes in the plancher, already referred to. By the simple means described the roof of a house can be kept cool, so that the snow will melt thereon only during a rise of temperature outside of the house, and cannot therefore freeze at the edge of the roof and bank up. The current of air passing along under the roof can be greatly increased, and the cellaror space between the house and the ground thoroughly ventilated, removing dead air and preventing dampness in this way. The upper inside corners of the sills are beveled at intervals, forming passages, l, which allow the air from the cellar to ascend between the lath and plaster and the outside sheathing to the top of the wall of the house, where it passes through openings, p, and joins the current under the roof.

In constructions where a plate is used as a support for the rafters the openings, p, are made in the plate; but it is preferred to connect the tops of the studding by means of inside and outside boards, s, Fig. 3,) on which the rafters are de-signed to be rested. The opening between these boards affords a large and free passage for the air.

An additional beneficial effect of the construction is found in the rooms next the roof, these being rendered cool and pleasant in the heat of summer and preferable as sleeping apartments to the rooms below. The various apartments of the house may be ventilated through the devices described, suitable register openings being provided leading into the space between the studs behind the plaster. The air passes up through the openings in the plate or between the boards, s, at the top of the wall. If the wall is plastered no higher than this point, a horizontal box or conduit, z, is arranged over the openings, p, as shown in Fig. 2, and connected with the openings, so that the draught coming up between the studs which confine the room ventilation passes into the box, and is conveyed through an opening in the end rafter into the Sandy Hook. This is two hours better than her previous end cornice of the building, whence it passes out through the ventilating openings in the plancher. In this construction it will be seen that the side wall ventilation does not join the roof current until the cornice is reached, so that the warm air from the rooms cannot neutralize the effect of the cool current from the cornice under the roof, although the venting snow from melting on the upper part of the house; latter is improved thereby. If the house is plastered in the garret portion as high as the roof ties, the box or air con-

duit, z, is placed above the ties, and a flue, w, is constructed

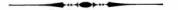
leading from the openings, p, at the top of the side wall to the conduit. This improvement was recently patented by Mr. P. G. Eaton, of Springville, Erie county, N. Y.

..... A Remarkable Gas Well.

The well finished in April last by the Niagara Oil Company, in Washington county, Pa., is one of the greatest gassers of modern drilling days. The sands found were not regular, nor as expected, neither did they appear to be oil bearing. After a six months' struggle with the drill, a depth of 2.200 feet was reached, when a vein of gas was struck which threw the tools clear out of the hole, and more than fifty feet above the top of the derrick. The strength of the gas can be imagined when it is known that the tools weigh about 800 pounds. All work was then out of the question, as the gas made such a roaring noise that the drillers had to go away from the well fully 300 yards before being able to make themselves understood. The company have expended already more than \$20,000, and e nothing to show for their money but leases of 60,000 acres of land and the great gas blower. The well is eight miles north of Washington, Pa., in Mt. Pleasant Township. It is just twentytwo miles from Pittsburg, and may be utilized by the latter city in case the supply does not become exhausted soon.-Petroleum Age.

EATON'S VENTILATING SYSTEM.

connection therewith of air passages extending upward between the lath and plaster and the outside sheathing.



A BRASS steam-whistle, thought to be the largest ever made, has just been finished by the Eaton, Cole & Burnham Co., 58 John St, New York. It is of cast brass, 4 ft. 9 in. in length, the bell having a diameter of 20 in. Its weight is 400 lb., and its value \$500. The supply pipe is 4 in. in diameter. It goes to a large steam saw mill in Canada, where it is to be employed, with a system

that by some gentle lift of the earth's crust. hereafter, or slotted plancher and perforated end rafters, and in the of signals, to give orders to the lumbermen at a distance, and to summon the widely scattered employes in case of fire.