

**A DESTRUCTIVE THUNDERBOLT.**

A rather curious thunderstorm visited the neighborhood of Whitby the other week. There were only two loud thunderclaps, accompanied by two flashes of lightning. The first stroke caused the destruction of a large oak tree in the park of Mulgrave Castle and the second damaged rather seriously a farmhouse in the village of West Barnby, about two miles distant. In the case of the oak tree the electric current seems to have run upward. The ground for several yards was torn up, and the large root of the tree was ripped in



EFFECT OF LIGHTNING ON OAK TREE.

pieces. For a circle of a diameter of 160 yards the ground is littered with heavy pieces of bark and wood, in some cases split into ribbons. We are indebted for our engraving to Black and White.

**PETROLEUM WELLS IN THE SUBURBS OF LOS ANGELES, CALIFORNIA.**

The discovery of petroleum within the city limits of Los Angeles, California, has so transformed one of the suburbs of that city that as a remarkable spectacle there is nothing to compare with it in any city in the world. The accompanying illustration is reproduced from a photograph taken in one of the outlying suburbs, in which, some three or four years ago, a profitable oil-bearing stratum was discovered. The fact that the oil underlay a thickly settled territory, where most of the land was divided into fifty foot lots, naturally made each landholder anxious to secure the oil before it should be drawn up by his next door neighbor. The consequence was that wells were driven with all possible speed, and a picturesque residential district was very quickly covered by the huge, unsightly derricks and tanks which are to be seen in the engraving. Every consideration gave way to that of securing the valuable oil, and, as a consequence, the pretty cottages with their surrounding lawns and shrubbery were soon incongruously intermingled with all the unsightly paraphernalia of hundreds of modern drive-wells. In his hurry to secure the oil the owner of a little 50 by 150 foot lot in some cases erected as many as five derricks within that area. Naturally this haste to grow rich defeated its purpose, and after a year or two the wells began to decrease in yield. Some of them, it is true, began to yield again later to a limited extent, while other wells have been abandoned altogether. Of course the work of recovering the oil might have been done more economically if the property owners of half a dozen lots had combined to sink one well between them, instead of sinking two or three wells to

each lot, as they have actually done. In some cases, after the first exhaustion, the wells were sunk to a greater depth, with the result that a further flow was encountered.

Petroleum has been produced in California for many years, and the oil fields seem to extend throughout the whole length of the State, as indicated by the frequent oil croppings. It is only in the southern counties, however, that there has been any development of the industry, and this has been confined mainly to the counties of Ventura, Santa Barbara and Los Angeles.

The discovery of oil in Los Angeles has naturally created quite a boom in the industry, and prospectors are busy in other sections of the State.

The early Mexican residents of Los Angeles were aware of the fact that there was petroleum in the formation underlying the city, and they used the asphaltum residue of the oil which they gathered at the outcropping for roofing their adobe houses. In those early days the commercial value of the oil was unknown, and the Mexicans made no attempt to utilize it. The first boring for oil was made about four years ago at a point about one mile west of the business center of the city, and since then over five hundred wells have been sunk within the city limits and within an area which extends over a mile east and west and about 600 feet north and south. During the past nine months new wells

have also been sunk with a fair measure of success about half a mile beyond the eastern limit of the producing field above mentioned.

The Los Angeles oil differs from that of Pennsylvania in that it has an asphaltum instead of a kerosene base, and is not suitable for illumination. It is thick, and black in color, with a low specific gravity, and it is said to be the best fuel oil that has ever been discovered. It is used for the manufacture of lubricants, paints, printing ink and various other commercial products. The cost of sinking a well varies considerably, but \$1,200 to \$1,500 may be taken as the approximate cost for a well 800 feet deep.

As was to be expected in a new industry such as this, there has been a considerable fluctuation in the price of the oil in Los Angeles. It was first sold for about \$2 per barrel of 42 gallons. The price began to fall rapidly, until it reached as low a figure as 35 cents per barrel. A Co-operative Oil Exchange was then formed, and this, together with the increasing use of the oil in factories and by some of the railroads, brought the price up to \$1 a barrel, delivered at the well. At this figure it remained until the spring of this year, when the increased demand caused the price to rise to \$1.50 at the well, at which figure it now stands. At this rate it is considered to be a cheap fuel in comparison with coal.

A ton of soft coal is reckoned to be equal as fuel to three barrels and a half of oil, which would make the equivalent cost of coal in Los Angeles about \$5.50 per ton, at the factory. At this price it is considered that Los Angeles manufacturers should be able to compete with those in the East. The daily yield of oil is from 4 barrels a day in the older wells to 40 barrels a day in those which have been recently bored at the western edge of the field. At the present price, this represents a total output valued at \$1,250,000 per year.

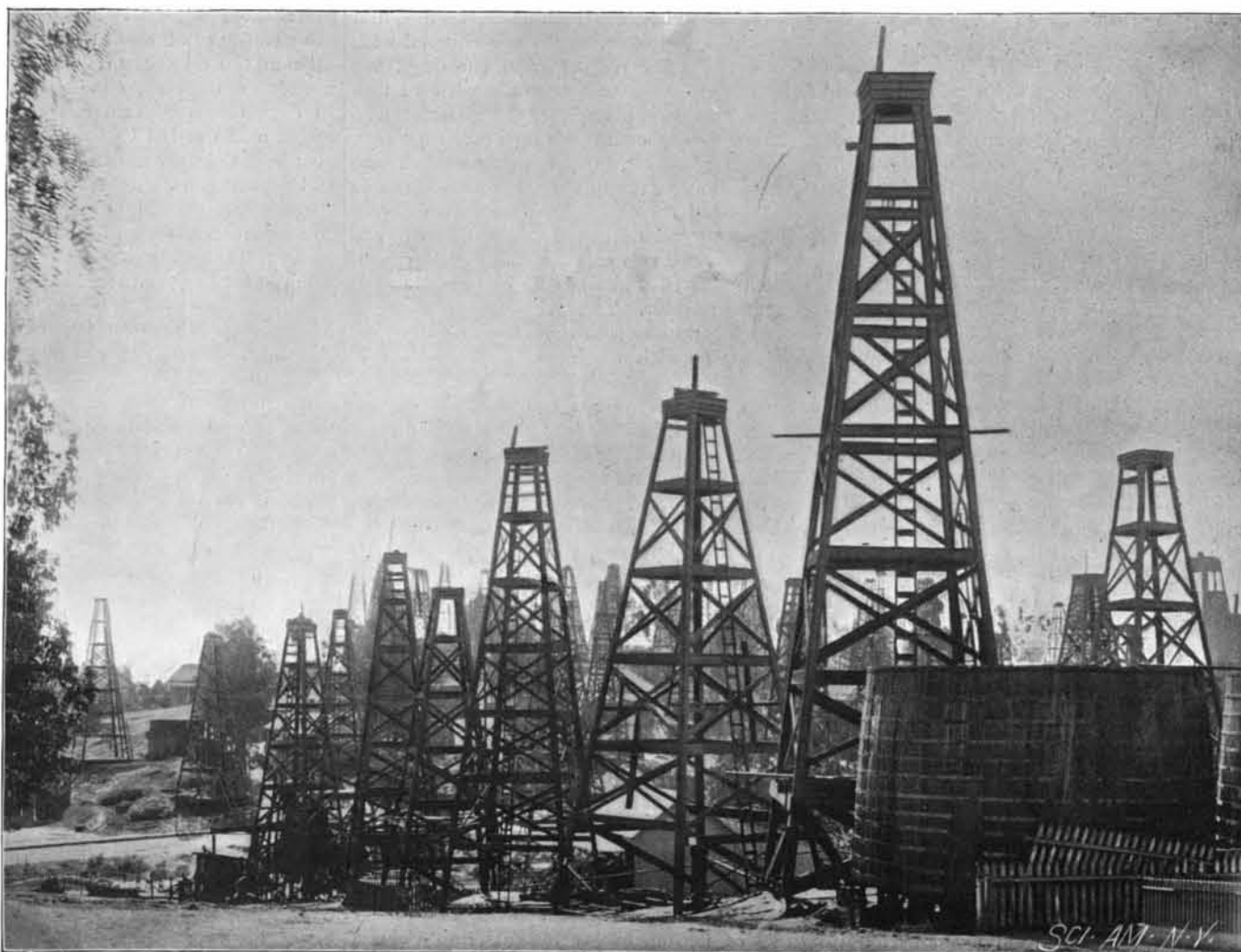
It was natural that the development of these fields within the city limits should meet with considerable opposition from citizens who object to see the suburban section of Los Angeles rendered hideous by such a forest of grimy derricks as are shown in the accompanying illustration, and the opposition has been particularly strong since wells have been driven in the direction of the handsome residence section surrounding Westlake Park.

The city council has very wisely passed an ordinance forbidding the boring of wells within 1,600 feet of this park, and it is likely that the disfigurement of the city will be confined to the strip of land to which reference is made above.

**The Borghese Treasures.**

Ever since the bankruptcy of the Borghese family in 1892, art lovers have been afraid that this collection, which is one of the most remarkable in the world, would be dispersed, but it is now announced that the Italian government is to pay 6,000,000 francs, about \$1,200,000, for the pictures and statues in the museum, while the city of Rome will pay about \$600,000 for the great villa and the park which the museum occupies. Now not only will the collection be kept intact, but the villa, which is perhaps the finest of the old Roman villas built by the popes, will also be preserved. The building speculation which ran riot in Rome a few years ago has already destroyed too many of the lovely palatial villas, and it is a satisfaction to have one of them kept from despoilment. The park, which consists of a large tract of rolling meadow and woodland, exhibits in perfection the unsurpassed beauty of Italian landscape art. It has little of the formal gardening of the Villa Medici, and more nearly resembles a great English estate wherein nature is left much to herself. But added to this perfectly free and easy treatment will be found the beautiful ilex trees and stone pines, with here and there an avenue of cypresses. In the villa is preserved the great collection which the government has just bought. The Borghese collection was first formed by Marco Antonio Borghese before 1800. His son, Prince Camillo Borghese, married Pauline Bonaparte, the sister of the Emperor Napoleon, and in 1806 sold to his brother-in-law the most valuable of his treasures, which now adorn the Louvre. Afterward he gathered the new collection which the Italian government has just prevented his descendants from getting rid of. None of the antique marbles are

of very great importance, but in modern statuary and pictures the gallery is exceedingly rich. Indeed, it is generally believed to be the most valuable private gallery in the world; it is certainly the most valuable private collection of Italian masters in the world. Perhaps the most famous of the pictures is Titian's "Sacred and Profane Love," and Correggio's "Danae," after its long wanderings, here finds a home. Raphael is represented by the "Entombment," which has a very interesting history. There are other pictures by Sodoma, Fra Bartolomeo, Andrea del Sarto, Francesco Francia, and many others. The decadent masters of the High Renaissance are probably better represented here than elsewhere.



AN OIL FIELD IN THE SUBURBS OF LOS ANGELES, CALIFORNIA.