

# Scientific American.

ESTABLISHED 1845.

MUNN &amp; CO., Editors and Proprietors.

PUBLISHED WEEKLY AT

No. 261 BROADWAY, NEW YORK.

O. D. MUNN.

A. E. BEACH.

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NEW YORK, SATURDAY, JULY 22, 1882.

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## THE BOMBARDMENT OF ALEXANDRIA.

The Egyptian revolt, under Arabi Bey, against the government of Egypt by European powers in the interest of European creditors, has ended in war. As the party chiefly interested—through the ownership of the Suez Canal and otherwise—England has assumed the responsibility of "restoring order," and has proceeded in the usual way, by bombarding Alexandria, the chief commercial city of the country. The bombardment began at 7:45 on the morning of July 11. The attacking fleet comprised seven powerful ironclads and the gun-vessels Bittern, Condor, Beacon, Decoy, and Cygnet. The strength of the ironclads is shown in the following table:

Vessel.	Inches armor.	Guns.	H. P.	Tons.
Inflexible.....	16-24.....	4-81-ton.....	8,000.....	11,406
Superb.....	10-12.....	4-25-ton.....	7,430.....	8,760
Monarch.....	8-10.....	4-25-ton.....	7,842.....	8,322
Sultan.....	6-9.....	8-18-ton.....	8,629.....	9,236
Alexandra.....	8-12.....	2-25-ton.....	9,492.....	8,615
Téméraire.....	8-11.....	4-25-ton.....	7,700.....	8,540
Invincible.....	6-8.....	10-12-ton.....	4,832.....	6,024
Penelope.....	5-6.....	10-12-ton.....	4,702.....	4,394

The defenses consisted of forts and shore batteries, mounting for the most part guns of antiquated patterns, firing round shot only, and unskillfully handled. The Egyptians showed great stubbornness, but the weight of metal was overwhelmingly on the side of the fleet. The Inflexible did good work at ranges varying from 3,000 to 5,000 yards, shelling forts right and left from her two turrets. The Monarch fired 200 heavy shells and 6,000 pounds of shot from Gatlings and Nordenföhl machine guns.

The effect of the electric broadsides fired from the Sultan and the Alexandra was very destructive, and excellent work was done by the gunboats. In the course of the forenoon nearly all the Egyptian guns were silenced and the forts badly battered. The loss of men by the English was slight, five killed and twenty-seven wounded. The Egyptian loss was apparently heavy. None of the ships was materially damaged; few were hit at all.

The next day (July 12) the sea was too rough to allow the fleet to do much execution; and at night the city was evacuated by Arabi Bey, after it had been given over to fire and pillage. The city had been much damaged by the shells of the fleet, and the natives retaliated by burning the European quarter, with a general massacre of the remaining Christians.

It is of course too early to determine how far this bombardment has contributed to advance the art of war. Important results are naturally expected, as it is the first time that the later types of guns and armor have been practically tested.

It is reported that the foreign military observers of the fight say that the English artillery did not greatly distinguish themselves by the rapidity or the accuracy of their fire, and the judgment of many is that lighter guns, more quickly served, would have ended the action sooner.

It is believed that Arabi Bey will retire with his army to Cairo, a fortified city of 350,000 inhabitants, 108 miles up the Nile.

## THE CITY OF ALEXANDRIA.

Previous to the political disturbances which caused a general exodus of Europeans from Egypt and led up to the bombardment and practical destruction of Alexandria, the city had a population of about 215,000 inhabitants, nearly 50,000 of them Europeans.

The city lies on the Mediterranean, near the mouth of the westernmost arm of the delta of the Nile, and occupies a peninsula, anciently the island of Pharos, and the neck of land connecting it with the mainland.

On each side of the isthmus is a good harbor, that on the west being mainly artificial. Its excellent position for trade made it the chief commercial city of Egypt and the great central station for passengers east and west, the steamers to and from India, the Levant, and Western ports all stopping there. It is connected with Mansoorah and the Suez Canal by railroad, and with Cairo by rail, canal, and river. In its newer portion Alexandria had the appearance of a European city. It was lighted with gas and supplied with water from the Nile. Besides its large export and import trade the city was the seat of large government and private manufactures run by steam. It had many fine residences. Among the prominent buildings were the palace of the Khedive at Ras-el-Tin, the large naval arsenal, the naval and military hospitals, the Custom House, Tribunal of Commerce, Italian College, and the various schools.

Alexandria was founded by Alexander the Great in 332 B.C. Under his successors, the Ptolemies, the city contained 300,000 free inhabitants and as many slaves. It became the center of learning, and schools of Grecian philosophy flourished there. Magnificent monuments were erected, among them the Pharos, the Museum, and the Temple of Serapis, and there were many gorgeous palaces and public buildings.

Julius Cæsar besieged and took the city in 48 B.C., and eighteen years later Augustus made it an imperial city. It now began a new season of prosperity, continuing till the establishment of the seat of empire at Constantinople. The Catacombs, public baths, and Pompey's Pillar, with the Roman city wall were erected during this period. In the year 215 the Roman Emperor Caracalla visited the city and ordered a general massacre, and under the rule of Gallienus

a famine swept off half of the population. In 273 an insurrection resulted in the destruction of the great library of the museum. In 296 another revolt ended in a general slaughter, and in 365 an earthquake destroyed 50,000 persons. The Persians captured the city in 616, and yielded it to the Arabs in 641. It then contained 400 palaces, 400 theaters, 4,000 public baths, and 12,000 gardens.

From this time on it rapidly decayed, and its population and trade diminished. Cairo took its place as the chief city of Egypt. It finally sank so low that in 1777 its population was only 6,000.

## FIRING ALLEGED TO BE HEARD 1,000 MILES.

For the first time in history the progress of a great naval engagement has been consecutively reported by telegraph. A novel member of the fleet before Alexandria was a telegraph ship, through which, by means of the Mediterranean cable line, the War Office in London and the civilized world were kept informed of the movements of the war vessels and the results of the firing.

The nearest cable station from Alexandria was at Malta, distant about 1,000 miles from the scene of the battle. A press dispatch says that when a telephone was attached to the Malta end of the cable the firing of the guns at Alexandria could be distinctly heard, though no oral communication was possible over that length of cable. It is not stated whether a telephone transmitter was used at the Alexandria end, or whether the general electrical disturbance, caused by the explosion of the great guns, so affected the cable as to report the shots, through the telephone, at Malta.

## REMARKABLE DEVELOPMENTS IN OIL.

The history of the oil trade of this country does not furnish a parallel to the effect of recent developments. The result of the penetration of a certain rock 1,600 feet below the surface, in the wilderness of Warren Co., Pa., has been to form anew the map of the oil regions, to depreciate the value of oil above ground (30,000,000 barrels) 30 cents per barrel, or a total shrinkage of \$9,000,000, and to enrich a few and impoverish many. The history of well "646" would read like a romance, but the reality of its effect upon the trade is grim and matter-of-fact to the last degree. On the 1st of April last crude oil was selling at 80 cents per barrel. The producers had good grounds for encouragement in the general situation. Consumption was increasing, and one of the old producing regions (Bradford) was rapidly declining. Its young rival (Richburg, N. Y.) had reached its highest point, and everything in reason pointed to "dollar oil." Meanwhile a patient and often disappointed driller was nearing the end of his cable and his credit, in the dense hemlock forest of Cherry Grove township, Warren Co., six miles from any oil well, four miles from the nearest gas well, and two miles from a "dry hole." At 1,612 feet the sand pump brought up that which threw the owners of the well into a fever of excitement. They suspended all operations, boarded up and locked the derrick, and employed a patrol of armed men to keep out every intruder. Every available acre of land in the vicinity was quietly bought up by the few favored ones, and on May 18 the owners were ready to start the drill into the oil rock. In the interval, the fame of the "Mystery, No. 646" had traveled throughout the region. Producers in general regarded the whole affair as a deep-laid plot, but were uneasy nevertheless, and oil had dropped to 73 cents. Since the "Mystery" had exerted an influence on the market, 10,000,000 barrels had been sold "short," and every producer heartily wished "646" in Jericho. On the date named the fires were lighted and the drill started in the bottom of the well. By the time the soft pebble-filled rock had been pierced 8 feet the oil was flowing from the top of the well, through two two-inch pipes, at the rate of 1,400 barrels per day, and the entire trade was, for the time, paralyzed. To-day this well is rated at 800 barrels, and, since May 18, a 3,000, a 2,500, and a 2,000 barrel well have each added their production to the original "Mystery," a town has grown up in the hemlock forest, and a score more drills are nearing the same long neglected storehouse. The price of oil has reached 52 cents, and the older oil regions are being depopulated to fill the new field with excited multitudes. One thousand dollars an acre and half the oil is the price for all the land on the "45 degree line" along which the larger wells have so far been developed. Garfield City is to-day the Mecca of the oil producer, and is as strange a creation itself as can be noted in the entire oil country.

## Breaking Iron with Dynamite.

The application of dynamite to the breaking up of masses of iron too great to be broken by other means, was successfully tried near Chicago recently. A refractory chunk, "salamander," of twenty tons weight, was placed in a pit. A hole was drilled in the iron, and a charge of dynamite was inserted. Several bars of iron, weighing tons each, were placed over the pit in order to prevent small pieces of the metal from flying heavenward. The cartridge was connected with a battery, stationed one hundred feet from the pit, and after the spectators had found secluded places, the word was given, and in an instant the twenty tons of iron that had previously stood all kinds of hammering, was reduced to fragments. The steel men were completely surprised, and admitted that a feat was performed that before was held impossible.