DESTRUCTION OF ANTIOCH.

The city of Antioch, or a very large portion of it, has been destroyed by an earthquake. This is the sixth time during the past eighteen hundred years that the once famous Syrian city has been visited with destruction from the same cause. An earthquake reduced it to ruins in A. D. 115; and again in A. D. 458, A. D. 526, A. D. 587, and in A. D. 1822. From the last of these awful visitations it had never recovered and the population that in the time of Chrysostom numbered 200,000, including a Christain Church of 100,000 members, was now reduced to 6,000 souls.

Few cities have suffered so many terrible visitations as the once beautiful "Queen of the East." In one of the wars of the Maccabees 100,000 of its inhabitants were put to the sword; in A. D. 155 it was destroyed by fire. it was severely handled by foreign foes in troublesome times succeeding the fall of the Roman Empire; in A. D. 331 a famine so dreadful overtook it that a bushel of wheat sold for four hundred pieces of silver. Two other famines followed the first in quick succession. Theodosius punished the inhabitants severely for resisting his imposts; it was the alternate prey of Saracen and Crusader for nearly two hundred years; and its wretched hovels, dirty streets and uncultivated gardens have for centuries presented a sad contrast to its former splendour.

The despatch announcing the latest disaster states that not less than 1,500 persons have lost their lives, and that the survivors are in extreme distress. It is not to their own miserably inefficient Government these unfortunate people will look chiefly for relief in the hour of their dire calamity. But help will no doubt be speedily forthcoming from nations bearing the designation first given to the followers of the Nazarene in jest by the witty and frivolous people of Antioch.—*Globe.*

THE BRITISH NAVY.

From an official return just issued by the English Board of Admirality, it appears that the list of steamships of the Royal Navy presents the following numbers:—Armor plated ships—first-class, iron six; third-class, five iron and four wood; fourth class. three iron and five wood; unclassified ships and gun boats, three iron and two wood; special ships with turrets eleven iron and one wood; floating batteries three iron and one wood; making a total of fifty-two armor plated ships afloat—thirty-seven of iron and fifteen of wood; and to these must be added three turret ships building, bringing the total of armour-plated ships to fifty-five—viz. forty of iron and fifteen of wood afloat or building. The addition of other than armor plated ships brings the total to 358 steamships afloat, 295 screw and 63 three paddle; twenty-five building; twenty steamships from which the machinery has been removed afloat. The grand total of steam vessels is therefore 403, of which twenty eight are unfinished. Ships for the defence of the colonies are not included in this list. On 1st of December, 1871, there were 232 ships and vessels in commission, one hundred and seventy four steam and fifty eight sailing; this is exclusive of Indian troop-ships.

Although the ability of ships to carry armor of the heaviest kind has been sufficiently proved, all the progress of nearly two decades seems to leave the question of naval warfare about where it was in the old days of wooden walls. That is, the victory in an ocean combat may be expected not for the most impregnable, but for the most powerful ship, offensively speaking. Such, according to the *Broad Arrow*, was the conclusion of a meeting at the British Institute of Naval Architects. "If we caught correctly the feeling of the meeting, says our contemporary, the prevalent opinion was that offensive gun power was of a far greater importance than defensive armor power, and that a high rate of speed, combined with an armament of powerful guns was beyond all other conditions essential to our ocean-going cruisers."

Of course the changes in naval construction are none the less real, and warfare will hereafter be conducted on a very different plan from that of old days. But, as has so often been proved before, it is evident that no mechanical device can supplant personal ability. Pluck, dash and skill, will tell as well behind iron casemates as on open decks, and there is no reason for expecting that the use of armor will throw naval supremacy into new hands. Those nations which have proved themselves able seamen will probably continue, under all circumstances, except positive national degradation, to hold their leading positions, while those which, having possessed a seacoast for centuries, have never developed a nautical spirit, can hardly hope to suddenly bloom into naval importance through the help of mechanical aids.—*U. S. Army and Navy Journal.*

PETROLEUM.

At a time when the oil monoply in the States is attracting so much attention, it may not be uninteresting to have a short history of this useful article, as given in a report by Dr. Chandler, to the New York Board of Trade.

"Petroleum although known from time immemorial, was not used as an article of commerce until 1859, when American enterprise successfully bored an artesian well for the purpose of procuring oil from the rocky strata below. The earliest evidence of the use of petroleum is found in the ruins of Nineveh and Babylon. That used at Babylon was obtained from the springs of Is, on the Euphrates, which at a later date, attracted the attention of Alexander, of Trajan, and of Julian. Herodotus, 500 years before Christ, spoke of the oil wells of Zante; and Pliny and Dioscorides described the oil of Agrigentum, which was used in lamps under the name of 'Sicilian oil.' In one of the Ionian Islands there is a spring which has yielded petroleum more than 2,000 years. The wells of Armenia, on the banks of Zaro, were formerly used for lighting the city of Genoa. In Persia, near the Caspian Sea, at Baker, numerous springs of petroleum have been known from the earliest times. The springs of Rangoon, on the Irawaddie, have been worked for ages, and the perpetual fires burned on Pagan shrines are supposed to have been caused by springs of petroleum ignited at the surface. The American Indians collected petroleum which was sold for various purposes under the name of Seneca oil. The oil wells in Pennsylvania are known by the trees now growing upon the earth thrown out in making them, or growing in the wells themselves, to be from 500 to 1,000 years old, One of these in Titusville, was found after it was cleared out to have been twenty-seven feet deep and five or six feet in diameter. In 1819 oil was accidentally obtained in boring two salt wells on the Muskingham River, Ohio. In 1829 a flowing well was accidentally discovered at Burksville, Kentucky, and for two or three weeks the oil flowed over the surface of the Cumberland River, and becoming ignited, caused some apprehension of a general conflagaration among the inhabitants of the villages lower down on the river. In 1836 from fifty to 100 barrels of petroleum were collected in the valley of the Kanawa, and sold as medicine."

ANOTHER IRON CLAD RAM.

That terrible weapon of warfare launched on Tuesday—the *Rupert*—foreshadows a new feature in naval engagements. The vessel is herself one huge projectile destined to be hurled upon the broad side of the enemy; and the very few experiments of this kind which have been made show how fatal such an assault is likely to prove to the largest ship afloat. At Lissa the Austrian ram *Ferdinand Max*, armed, like the *Rupert*, with a spurbow, sank the *Re d'Italia* with one shock, and severely damaged three other vessels. The *Merrimac*, at Newport, inflicted the same fate on *Cumberland*, and even the light wood sloop *Amazon* sunk the merchantman *Osprey* with her slight iron cut water. Mr. Reed in his work on 'Our iron-clad ships,' has given some figures that illustrate the force possessed by the *Rupert*. She weighs about 5,000 tons, and if this great mass were sent at ten knots per hour, the energy of the impact on an enemy's side would be 22,500 foot-tons. Now, a 600lb shot from a 25 ton gun, which is capable of penetrating any iron-clad but one or two afloat has an 'energy' at the muzzle of the gun of a little over 6,000 foot-tons. It is clear by this that no vessel ever put together could resist the direct blow of such an antagonist. On the other hand, it will always be extremely hard to hit a vessel under fair control. While a ship has good way upon her and answers quickly to her helm, the deadly ram unless smartly handled will not get chance to attack. It will only be when an enemy has taken station, has become disabled, or is hampered in movement, that this kind of assault could succeed. A spur bow, such as the *Rupert* carries, might no doubt be used again and again in the toughest iron-clad without wrenching, but great skill with the helm and the engines would be required, and the shock of the strokes would be awful even for the *Rupert's* crew, Though the *Ferdinand Max* was very slightly injured at Lissa, some of her crew, who forgot to swing themselves by the beams or lie down, were nearly killed. The *Kaiser*, which tried ramming at Lissa, lost her foremast with all its gear, and disabled her engines. On the whole it is by no means likely that guns will be given up, and that naval actions will take the character of Lissa and the old maratime conflicts, but whenever an opportunity occurs this kind of attack, if well delivered, will do more than a long cannonade; and we may be glad that in the *Rupert* and *Hotspur* we have good models of the ram—short quick to turn, and strong as a rock.—*London Telegraph.*

The Scotch are becoming the naval architects of the British Empire. According to a parliamentary return, there were 40,000 tons more of shipping in course of construction in Scotland than in England.

REMITTANCES Received on Subscription to THE VOLUNTEER REVIEW up to Saturday, the 20th inst:—

KINGSTON, Ont.—Qr.-Mr. Geo. Thompson, $2.00
TORONTO.—(Per Agent)—Col. G. T. Denison, Jr., $1.
ST. JOHNS, Que.—Lieut.-Col. R. Douglas, $2.00.
THREE RIVERS.—Lt.-Col. J. M. Hanson, B.M., $2.