

## CANADIAN PATRIOTIC SONG.

Let other tongues in older lands,  
Loud vaunt their claims to glory,  
And chant in triumph of the past;  
Content to live in story;  
Though boasting no baronial halls,  
No ivy-crested towers,  
What part can match thy glorious youth,  
Fair Canada of ours!

We love those far off ocean Isles,  
Where Britain's monarch reigns,  
We'll never forget the good old blood  
That courses through our veins,  
Proud Scotia's fame, old Erin's name,  
And haughty Albion's powers,  
Reflect their matchless lustre on  
This Canada of ours!

Long may our country flourish then,  
A goodly land and free!  
When Celt and Saxon hand in hand,  
Hold sway from sea to sea.  
Strong hearts will guard our native homes,  
When darkest dangers lower,  
And with our life-blood we'll defend  
This Canada of ours.

## CIVIL ENGINEERING AT THE TIME OF CHRIST.

Extensive surveys of the island of Britain were made by the Roman Agri-mensores (country surveyors), who availed themselves of the ancient Druids' barrows of Wiltshire, and artificial structures erected before the Roman conquests as points to and from which to draw their base lines. Mr. Blake announces this curious fact in his paper on the Geometric Use of American Mounds read before the London Antiquarian Society, and gives the proofs of his assertion in his edition of Antonine Itineraries prepared under the direction of the Master of the Rolls.

The Roman genius for construction was the grandest the world has seen. The traveller who visits the cathedral fane of York and Bruges' Burgos and Seville, Cologne and Milan, the castles of Windsor and Heidelberg, and St. Elmo, the temples at Pæstum at Athens, at Baalbec, and at Thebes; the palaces of the Maharajas, on the banks of the Ganges, sees monuments of splendid beauty unsurpassed in any age by any people, yet he returns to Rome, and says, while standing upon the vaulted ruins of the Baths of Caracalla, or while counting his steps across the floors of Constantine's Basilica, or while looking down from the uppermost tiers of seats into the arena of the Coliseum, that the constructive genius of all the rest of the world must bend before the Imperial Latin Engineer.

Never but once were thus combined in the political situations of a city, all elements needful for carrying up the culture of mere building talent to the highest pitch while at the same time it offered unlimited opportunities for its exercise. Rome was a seaport, backed by a country fertile in supplies, a peninsula of mountains made of marble, in the centre of a sea crowned with well settled islands, and girt about with coasts inhabited by the oldest, richest and most advanced communities of men. The Roman States were still physically undeprived, in the prime of its strength, irresponsible and unscrupulous, proud and vain, sensual and sensational, loving war only for the sake of its enjoyments. The bath house was the church of Rome, combining the essential quality of the exchange, the club, the museum, the bar room and the polls. The Emperors enriched themselves and confirmed their power by watering their political stock.

Caracalla could afford his horse a golden manger in a temple of its own, after affording his fellow citizens a bagnio as large as the Tuilleries, in which ten thousand bathers could enjoy themselves at once, the ceilings of which were eighty feet high the partition

walls as massive as the abutments of a bridge. The sweating-room alone was larger than the Philadelphia Cathedral, and surrounded by arcades, supported by costly Corinthian columns, the abstraction of which by the mediæval princes of modern Rome, for use in the construction of the private palaces, brought down the ceiling with a crash which shook the city as far off as the Castle of St. Angelo.

St. Peter's is built on the model of these ancient monuments. Its nave precisely of the size and shape of the great room in the Baths of Diocletian and of the *opus* of Constantine's great church. Its dome is precisely the shape of the Pantheon, which as is now well known was yet another Imperial bath-room, since then appropriated to the use of religion. The great Bath room of Diocletian is also one of the grandest churches of modern Rome.

The necessity of supplying an amphibious population with floods of fluid, developed the civil engineering talents of the Empire. Scores of aqueducts were constructed above ground to bring the waters of the Appenines into the city, and an elaborated system of sewerages carried it away again to be purified in the bosom of the Ligurian Sea. While Signor De Rossi has been excavating the ancient Catacombs outside the walls; and the Government Antiquarian, Baron Visconti, the ancient marble yards, and police stations inside the walls; and the Emperor Napoleon, the foundation rooms of the palace of the Caesars; the British Archaeological Society of Rome has been digging along the ancient walls themselves, and opening up the underground water works, reservoirs and sewers of ancient days. They have determined the true site of the fountain Egeria and of King Numa's Palace, how Royal Rome, Republican Rome, and Imperial Rome were in succession fortified with longer and larger circumvallations: and how the water pipes of the engineers of the Middle Ages were ranged within and upon the conduit of Servius Tullius and the Tarquin's. Any civil engineer who is curious in such matters, or would like to see nice pictures of the rubble works of his predecessors in the profession, twenty two centuries ago, can gratify himself by looking over Mr. Parker's "Notices of recent Excavations in Rome," just published in Part I. of the forty-second volume of the *Archæologia-By-the-by*. Mr. Parker's little handbooks of Architecture are not only indispensable to the tourist, but should be in every American gentleman's library. And it is worth knowing, also, that the Archaeological Society which foreigners in Rome keep up, has upward of a thousand special photographs of Specimens of Roman Construction, arranged in the order of time.

The first part of this interesting collection is already for sale, and illustrates the historical construction of walls in a series of sixty-four examples, beginning with the wall of Romulus, 750 B. C., and taking on an average one for each generation. The series is continued down to the 13th century A. D. In the time of the Empire the dated examples are so numerous that they are necessarily subdivided, afterwards the churches and monasteries supply us with a continuation of the series. This is really a great work for the history of architecture, such as had never been done before. Even L'Agin court, in his admirable work, overlooks construction, which is the foundation of all. It is sometimes impossible to get photographs from nature for want of sufficient space and it is generally necessary to fill up the excavations again immediately, so that the plans and drawings are the only mode of showing

what has been made out; but photographs are made of these and sent to the Oxford Architectural Society.—*R. R. Journal and Mining Register.*

## BYGONE FASHIONS.

The *People's Magazine* says: "Bring back the days of the old stage coaches, when all the conveyances that existed for transporting the inhabitants of this huge metropolis from town to country consisted of a couple of dozen or so of stage carriages carrying four inside and ten out. Why, a single Brighton excursion train now conveys more passengers at one journey than all the mails combined did in their four and twenty hours of sixty years ago. Cram back into those couple of dozen stage coaches all the travelling and locomotion of these days. It seems impossible for the world to have got on at all with such a state of things. Or to take a nearer instance. This house, this room for example, sixty or a hundred years ago. Shut your eyes and fill it once more with its old inhabitants. Then it was a most fashionable mansion, in the extreme West End, surrounded with nobility; the Belgrave Square of the eighteenth century. Fancy it on some gala or reception day, filled with gentlemen; ay, in this room, sipping their coffee, or engaged in a game of *ombré*. It may be that some one or more of the party have ridden over that day to Hyde Park corner, to where the Marble Arch now stands, to see some Jack Sheppard or Jonathan Wild drawn along in semi triumph through Oxford street—then a flaunting and irregular suburb—to make his exit at Tyburn; and here they are discussing the events and perils of the day. Was there ever a more useless costume? Powdered wigs, knee-breeches, silk stockings, long ruffles and shoes. Here is a gentleman whose whole ingenuity for a month past has been expended in contriving and adjusting the curls of his wig, here is another in plum coloured satin coat and peach-coloured small clothes, talking to his neighbour in colours equally bright and varied. Here a third is grinding the high backed chair on which he is sitting with the hilt of his diamond studded sword. One is astonished how the gentlemen of those days could have taken the air at all. Their silk and satin dresses would not keep them warm or fence off the weather; their three cornered hats, not made for the head but the hand, afforded no protection from the rain, or from the long gutters and water spouts, which shot their contents from the roofs of the soaking houses into the streets below, on the heads of unwary passengers. Then those wigs worn universally by all classes, high or low? No matter how poor the man, or how low his finances, a wig was indispensable. No citizen on Sunday, no clerk, no skillful mechanic, would think of appearing without this appendage. He would just as soon have thought of walking about in his night cap, or in no clothes at all, as show himself abroad without his wig. Those were the days when barbers flourished, when the spruce apprentice brought home his master's wig carefully suspended on a species of light block, with its last puff of powder and last turn of curls, ready for church on the Sunday morning. Ah! those wigs, what consternation did they make among the ladies! How many a rich widow, how many a proud heiress whom no sighs, no protestations could move, yielded to the charms of a handsome wig! The barbers were the most important men in England. Nay, so universal was the fashion, so indispensable was this ornament, that, as I have heard my