

Never can a gift too costly
Touch the manger's humble shrine;
Never can a gift too lowly
Jesus, touch that throne of Thine.

On the straw, which made thy pillow,
Poverty contented lies;
While our pride, like some spent billow,
Breaks against that crib, and dies.

Infant Jesus! Bethlehem's Wonder!
Maid's Babe! My God! My All!
By thy manger, can no wanderer
Vainly on Thy mercy call.

Civil Engineering at the Time of Christ.

Extensive surveys of the Island of Britain were made by the Roman Agrimensores (county surveyors), who availed themselves of the ancient Druid barrows of Wiltshire, and other 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 Ancient 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 faues of York and Bourges, Burgos and Seville, Cologne and Milan, the castles of Windsor and Heidelberg, and St. Elmo, the temples at Paestum, 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 situation of a city, all elements needful for carrying up the culture of mere building talent to the highest pitch, while at the same time were 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 vast sea, crowded with well-settled islands; and girt about with coast inhabited by the oldest, richest and most advanced communities of man. The Roman States were still physically undebauched; in the prime of its strength; irresistible lord of all Western and half the Eastern world; was infinitely rich; 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 qualities 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 Tuileries, 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, inside of 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 is precisely of the size and shape of the great room in the Baths of Diocletian and of the nave of Constantine's great church. Its dome is precisely the size and shape of the Pantheon, which, as is now well known, was yet another Imperial bath-room, since then appropriated to the uses 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 Apennines into the city, and an elaborate system of Sewerages carried it way again to be reperfused 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 Cæsars; the British Archæological 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 conduits of Servius Tullius and the Tarquins. Any civil engineer who is curious in such matters, or would like to see nice pictures of the rubble work 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 Archæological Society which foreigners in Rome keep up, has upwards 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 has never been done before. Even D'Agincourt, 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*.

OFFICIAL NOTICES.



Ministry of Public Instruction.

APPOINTMENTS.

The Lieutenant-Governor,—in and by virtue of the powers conferred on him by the 45th and 136th clauses of Chapter 15, Consolidated Statutes for Lower Canada,—by an Order in Council dated the 12th inst., was pleased to make the following appointments, for the hereinafter mentioned Municipalities:—

SCHOOL COMMISSIONERS.

Gore and Wentworth, County of Argenteuil.—Mr. Thomas Riley, in the room and stead of Mr. Samuel Smith.—no election being held in July last; St. Elzéar, County of Beauce.—MM. Alexandre Pageot, jun., and Louis Gilbert, jun., in the room and stead of MM. Etienne Lessard and George Lehoux, there being no election within the time prescribed by law;

Lavaltrie, County of Berthier.—MM. Jean Baptiste Hétiu, Antoine Brault, Isaac Giguère, Xavier Lacombe, and Pierre Lacombe,—the elections of preceding years being irregular;

Paspébiac, County of Bonaventure.—MM. Rémi Parise and Louis Huard, in the room and stead of MM. Théophile Chapados and Jacques Hacquoit,—there being no election for 1869.

Ristigouche (Indian), County of Bonaventure.—MM. Pierre-Jacques Capland, Thom's Métallie, Louis Capland, Louis Barnabé, and the Revd. Joseph Hercule Léonard, the elections of preceding years being irregular;

Longueuil (village), County of Chambly.—M. Adolphe Cherrier in the room and stead of M. Pierre St. Marie, retired from office, the election of 1869 being irregular; M. Pierre Moreau in the room and stead of himself, and M. Camille Provost, in the room and stead of M. Siméon Bonneville, retired from office,—the election of 1870 being irregular;

St. Malachie d'Ormstown, County of Chateauguay.—Messrs. Thomas Williams, George Elliott, Archibald Cameron, James Steele, and Francis Whitball,—the elections of preceding years being irregular;

Grande-Rivière, County of Gaspé.—The Revd. M. Pierre Saucier, in the room and stead of the Revd. M. Adeline Blouin, removed from the Municipality,—there being no election held within the time prescribed by law;

Longue-Pointe, County of Hochelaga.—M. Léon Léonard, in the room and stead of himself,—the election of 1869 being irregular;

St. Emmilie, County of Joliette.—MM. Jean-Antoine Leprohon, Pierre Robillard dit Lambert, Louis Rondeau, Pierre Gaboury, and Jean-Baptiste