

and other master-pieces of architecture, as just are the relations of each part to the other, and so severe and simple the style in which the whole has been designed, that at a distance the stupendous dimensions are not appreciated, and except from beneath there is no way of inspecting it as a whole close at hand. There you can look it and see what it is. To attempt any description of it now would be useless, for as far as it can be described it has a ready been, and those who have not visited it are sufficiently familiar with its form through the medium of illustrations, but there are some striking facts with regard to it that may be mentioned, and that will help to give an idea of what a personal inspection can alone enable one fully to appreciate. When the best method of raising the tubes was first discussed some thought that it should be done as speedily as possible—that the hydraulic presses should be set in action without any attempt to support by packing underneath the lift, which they accomplished, and that any risk from the failure of tackle in having each tube suspended without support should be encountered. In this way the lifting might have been done in 24 hours, whereas it took three weeks.

Mr. Stephenson after due consideration adopted the safe course. He made the six feet lift of the press occupy a period of three hours, and the raising and packing underneath was carried on so simultaneously that the tubes were never for a moment left without support. The bursting of the press a few days after operations were commenced, proved the wisdom and necessity of his caution. Had he not exercised it, the Britannia bridge would never have been completed, and it was no doubt with feelings of justifiable pride that he yesterday showed to Her Majesty and the Prince the fractured cylinder, which has been placed on a pedestal near the bridge,—a monument of the prudent skill which watched over its construction. Another illustration of what this work is, may be drawn from the fact that the chains used to raise the tubes were 10 inches square, or about the thickness of a man's body, and that notwithstanding that enormous strength, in the process of lifting, stretched an inch and a half, returning to the old size when the pressure was withdrawn. The elasticity of iron was known previously, but had never been tested on so grand a scale before, and it certainly does give a tremendous impression of this bridge to know that the most massive wrought iron could give in the progress of it almost like India rubber. Not only did the chains yield but through the iron wall of the cylinder, 10 inches thick, the water oozed like perspiration wrought out from its pores by the enormous power exerted. Of the strength of the tube Mr. Stephenson gives the following satisfactory assurances:—He states that a line-of-battle ship might be suspended from the central point between either pair of towers, without injury to the structure, that it would bear at those points a pressure of 5,000 tons; and that, although sawn completely through, a railway train could still be run across with perfect safety. He maintains that it is more rigid than the ordinary permanent way of earthwork, and further, that it is stronger for the work it has to do than the rails in use on the different lines throughout the country.—Mr. Stephenson explains with great clearness how this wonderful strength of the Britannia bridge, which is double that of the Conway, arises; but the account of it would involve mechanical details more intricate than seems appropriate in such a narrative as this, and the bare statement is therefore given. On leaving to resume their seats in the train the Royal children took with them several bits of stones and brick as mementoes of their visit, and Prince Albert, turning to Mr. Stephenson, said to him "It is a stupendous work, and an honor both to you and to the company." In his recent work "on metal work, and its artistic design," Mr. Digby Wyatt alludes to the Britannia bridge as possessing the highest merits for the severe grandeur and noble simplicity of its style. An inspection of it more than confirms the justice of his encomiums. The vastness of its proportions, the absence of all attempt at frivolous ornamentation, the grave character of the outline forms, and the gigantic scale of the dimensions, uninvaded by any extravagance, all lead the mind of the spectator back to the sombre and stately relics of

Egyptian architecture. The huge lions that guard the entrance are in harmony with such associations, and if on closer inspection the mysterious sphinx-like air of response is found wanting, perhaps a wakeful looking animal best befits our times, when everybody is compelled to keep his eyes as wide open as possible, and when even the Pyramids would not be tolerated, unless they could be put to better service than the safe custody of mummies.

## CANADIAN FAMILY HERALD.

TORONTO, C. W., DECEMBER, 4, 1852.

THE FAMILY HERALD.

This number completes the first volume of the *Herald* and I take this opportunity of publicly thanking its respected contributors for their generous and ever welcome productions. To Alquis I am deeply indebted for his carefully compiled BIOGRAPHICAL CALENDAR, and for the INDEX to this volume which he has kindly supplied. To R. for his many interesting ORIENTAL SAYINGS, to C. for his NATURAL HISTORY, to the esteemed contributor of the GEMS, to P., and to all others who have helped us on through the revolution of the year.

The first number of the second volume will not be issued until the first Saturday of January 1853, in order to make a fair commencement with the year. Some slight alterations may be made in its arrangement, but the Family Herald will be found true to the principles upon which it started, and will commend itself to every family as one of the best, most pleasing and most instructive family papers in the Province. I have only to request that all desirous to commence the Second Volume will communicate the same to the Publisher, 54 Yonge Street; and that those who have not been called upon for their subscription for the 1st Volume, will be kind enough to remit before the end of the year. All money sent will be at the risk of the publisher. The Second Volume will be the same price—5s. paid in advance. An early attention to the latter part of this brief notice will oblige the

EDITOR.

### THE EMPIRE OF JAPAN.

In our brief sketch of this interesting country we reached the period at which the irrevocable idea of isolation was passed, a law which excluded all other nations from intercourse except the Dutch, who had through the intervention of William Adams, the English Pilot, obtained this privilege. Macfarlane says that Japanese tradition concurs with the early Dutch writers in representing the crisis as having been precipitated by the pride, rapacity and sensuality of the religious orders. "It is said that even the native converts were astonished, and grew impatient, when they saw that their spiritual fathers aimed not only at the salvation of their souls, but had an eye also to their money and lands, and that their pride was so great that they refused the prescribed marks of respect to men of the highest hereditary rank." . . . "Their neophytes with all the zeal of a recent conversion, not only told their countrymen that so long as they continued their heathen worship they had nothing to expect but eternal damnation, but they even proceeded to insult the donzes or priests, to overthrow their idols and pull down their temples." Persecution, as a necessary result, followed this outrage; but on these matters we do not love

to dwell. The part which the Dutch took in the war of extermination was very discreditably to themselves whatever extenuation may be urged. According to the most moderate estimate, there fell on both sides in this war of creeds 40,000 men,—although it is stated at perhaps double that number,—and so enraged were the authorities that over the vast common grave at Firando, this impious inscription was raised,—"So long as the sun shall warm the earth, let no christian be so bold as to come to Japan; and let all know that the King of Spain himself, or the Christian's God, or the Great God of all, if he violate this command, shall pay for it with his head." The Dutch, although they meanly assisted in this wholesale destruction, did not profit by it as they had imagined, for they were looked upon as a despised set of traffickers. And as the Portuguese religion was believed to be christianity, the Dutch were obliged to declare that they were not christians in order to escape being involved in a common ruin with the Portuguese. Yet mistrust and jealousy increased from that time, and in 1641, only two years after the expulsion of the Portuguese, the Dutch were ordered to quit their comfortable factory at Firando and confine themselves to the small islet of Desima, there to undergo an almost perpetual imprisonment. This little artificial islet is about 600 feet in length and 240 in breadth. It is shaped like a fan, and is joined to the island and town of Nagasaki, by a small stone bridge, at the end of which is a strong Japan guard house, with soldiers constantly on duty, to see that none enter or come out without license. In the harbour thirteen high posts are placed at regular distances from each other with small wooden tablets affixed to them, on which is the government order prohibiting any boat or person to pass the said posts or come near the Dutch quarters under a severe penalty. The whole islet is fenced in and surmounted with a double row of iron spikes, and they are subjected to a most debasing species of surveillance, at all hours, and are condemned to live a life of celibacy, no female being allowed to arrive on board the annual vessel. Such is the miserable state to which the Dutch reduced themselves by their anxiety to outstrip the Portuguese in the race for the monopoly of the trade of Japan. The slight connection which England has had with that Empire has been of a far more honorable kind, and would almost induce the hope that if the English could by any means be represented at Court as being now entirely free from any connection with any of the European nations, the memory of Adams might still operate as a charm to grant them that freedom of intercourse which America now seems to demand. The two letters which Adams wrote,—and from which we have already made several extracts,—were conveyed to London and submitted to the "Worshipful Fellowship of the Merchants of London, trading to the East Indies."—This was the original title of that powerful association known as "The Honorable East India Company."—The letters attracted considerable attention, and Captain John Saris, in command of the ship *Clove*, with the royal commission, and presents from King James I., to the Emperor of Japan, came to anchor in the bay of Firando on the 11th June, 1613, scarcely two years after the date of Adams's letters. Captain Saris immediately put himself in communication with Adams, and several most jovial