Poetry.

THE LOVE OF JESUS.

Yes! he has lov'd us!—See that child
With looks so radiant and so mild!
Lo, wrapt in swaddling clothes he's laid!
And see, a manger for his bed!
Beholder,—pause, and humbly view
The love that Jesus bore for you!

Yes! he has lov'd us!—when each day
He toil'd to save the sons of clay,
The garb of humbleness he wore,
And every contradiction bore;
Was mock'd, insulted, scoff'd at;—view
The love that Jesus bore for you!

Yes! he has lov'd us!—moving slow,
He goes, a victim to be slain,—
Faint 'neath the cross, and bending low
Amidst the ruthless, heartless train
Of bloody men; O, mortals! view
The love that Jesus bore for you!

Has he not lov'd us?—Calvary!—
Thou heard'st his dying prayer! reply!—
Say on thy height who lifeless lies?—
Man sins,—but tell why Jesus dies?
List, list!—"Oh sinful mortals! view
The love that Jesus bore for you!"

THE AIM OF LIFE.

Deep solemn thoughts within my soul are thronging—
Thoughts of the aim and object of my life,—
And with a strong and ardent earnest longing,
I yearn to know my mission 'mid earth's strife.

I know that life,—the life wherewith we're gifted—
Is given us for some purpose and some end;
That it must not as ocean weed, be drifted,
Without an object whereunto to tend.

I would not waste my life in only dreaming
Dreams shedding light upon my soul alone,—
Forgetful of the eyes with sorrow streaming,
The hearts bereft of all they've loved or known.

Fain would I cheer the sad and weary-hearted,
With the glad thoughts which God to me hath given;
Or soothe the souls from whom all light is parted,
With gentle words of joy and peace in heaven.

Fain would I take the flowers which I have gathered,
And in my heart as treasures laid away,
And on the paths of those whose flowers are withered,
Strew them to gladden life's remaining day.

Father in heaven! Thou canst guide my spirit,
And teach it to perform its mission well;
That the glad life thou'st given me to inherit,
Be wasted not upon Time's billowy swell.

O let thy presence ever o'er me hover,
Then shall my life be spent for thee aright;
And when this brief existence shall be over,
"Another life" shall dawn upon my sight.

General Miscellany.

BRITANNIA BRIDGE OVER MENIA STRAITS.

Mr. Stephenson, the celebrated Engineer, being now on a visit to the Provinces, and his name being frequently brought before the public, we have thought the following description of the Britannia Bridge (a most extraordinary achievement of science) constructed by him, would be acceptable to our readers. We copy it from the Boston *Advent Herald*.

As we approached the Bridge, I could not repress some misgivings. The idea of an extended railway train going through an iron tube 15 by 30 feet, 1524 feet long, composed of wrought iron plates not over three-fourths of an inch in thickness, and in two places unsupported for a distance of 460 feet, and having a total weight of over 5000 tons! I kept looking out for it "with fear and trembling," saw farther to the north Telford,s beautiful Suspension Bridge; at length we turned a short curve and the two colossal lions, which guard the entrance, hove in sight, the pass-word was given by the watchman, "All clear!" and we entered the dark cavern, experienced a sensation of warmth, a strong smell of lamp-oil, and a hollow rumbling sound, till we emerged into the light all "safe and sound" on the other side.

From Llanfair I walked back to the Bridge for more particular observation. Perhaps my readers may be interested in a more particular account of it.

Menai Straits is a deep and boisterous passage of the sea between the main-land of Carnarvonshire in Wales, and the Island of Anglesey. The waters of the Irish Sea on the north and St George's Channel are continually vibrating backward and forward, and progressively rising or falling from twenty-five to thirty feet with each successive tide, and with a current of more than eight miles an hour. The object of the Bridge was to extend the Chester Railway across the Isle of Anglesey to Holyhead, and thus shorten the sea-voyage of the great thoroughfare between London and Dublin. From Holyhead to Dublin is only sixty four miles, while from Liverpool to Dublin is 138 miles.

It would seem as if the natural difficulties were enough, but in addition to these, it was required by the Board of Admiralty, that the proposed bridge should be constructed a good hundred feet above high-water level, to enable large vessels to sail beneath it; and moreover, that in its construction, *neither scaffolding nor centering should be used* —as they would obstruct the navigation of the Straits.

These difficulties were all surmounted by the ingenuity and skill of Mr. Robert Stephenson, Civil Engineer. The principle of the bridge may be thus illustrated.

Take a small straight stick freshly cut from a tree. In its natural form the bark around the stick is equally smooth throughout. Now let it be supported at each end while you bear down upon it in the middle so as to bend it, and will represent a beam under heavy pressure. The bark will present two opposite appearances. That in the centre of the upper half of the stick will be cramped up; while on the opposite side immediately beneath. it will be forced apart, thus showing that beneath the rind the wood of the upper part of the stick is severly compressed, while that underneath it is as violently stretched; and if the stick is bent till it breaks, the splinters of the upper fracture will be seen to interlace or cross each other, while those beneath will be divorced by a chasm.

But it is evident that these opposite results of compression and extension, must as they approach each other, respectively diminish in degree until in the middle of the beam they neutralize each other. It appears therefore that the main strength of a beam consists in its power to resist compression and extension, and that the middle is comparatively useless. Hence in order to obtain the greatest possible amount of strength, the given quantity of material to be used should be accumulated at the top and the bottom, where the strain is the greatest, or in plain terms, the middle of the beam should be bored out.

Upon this principle Mr. Stephenson undertook to convey the Rail-way trains across Menai Straits through hollow tubes instead of attempting to do it upon solid beams, and as a striking exemplification of the truth of his theory, it has been stated that while his tubes will bear nearly nine times the amount of the longest rail-way train that could possibly pass through them, yet if instead of being hollow they have been a *solid* iron beam of the same dimensions, they would not only have been unable to sustain the load required, but would actually have been bent by their own weight!

After a series of expensive experiments it was determined to give the tube a rectangular form, and to construct it of wrought iron plates rivetted together. Three immense towers were built to support the tubes—one based upon a rock in the middle of the straits which at high water is covered to the depth of ten feet—and one on each side between this and the opposite shore. The centre tower is 62 by 52 feet five inches at the base, tapering to 55 by 45-5 inches at tube-level, and the total height is 221 feet eight inches. It contains 1,500,000 cubic feet of stone, and 387 tons of cast-iron beams and girders, and weighs in all 20,000 tons. The Carnarvon and Anglesey Towers are each 184 feet seven inches above high water. There are a double set of tubes, so that trains can pass each other on the Bridge. The length of the tubes from the main land to Carnarvon Tower is 274 feet; from that to Britannia Tower, (the central one,) 472 feet; and and from that to Anglesey Tower 472 feet, and from that to the other side 274 feet. The total weight of the tubes is 11,366 tons! In order to provide for the expansion and contraction of the tubes, they are made fast in the central tower, but on either side through the shore towers, and on the abutments, they travel on cast-iron rollers. The sun breaking out of the clouds will make a difference of an inch or an inch and a half in the length, and the extreme variation between summer and winter is nearly twelve inches.

At the time of my visit only one set of the tubes was completed. I walked across upon the top of it and went inside of the other one where the men were at work and helped clinch the last rivet that was driven that day. No less than two millions of bolts have been used! After walking upon the top of the tube and examining its construction, I felt perfect confidence in its security. It seemed as firm as the solid earth. Indeed it has been asserted that scientific calculations have demonstrated that Britannia Bridge is capable of sustaining a greater weight than any embankment in the whole length of the Rail-way.

STATE OF SOCIETY IN AUSTRALIA.

"This is not the place it is represented to be. The climate is very unhealthy, the weather being very changeable. Society is very low, and it is impossible for any person to venture out of doors after dark, unless with a party of three or four, on account of the great number of English convicts from Van Dieman's Land, who infest the place. They number about two hundred, and meeting you in the street, they present a pistol to your breast, order you to hold your hands up over your head and then rob you. This is what they call '*sticking you.*' A gentleman boarding in the same house with me, about four o'clock the other afternoon was robbed of eighteen pounds, and then tied to a tree, where he remained until assistance was given him. This practice also extends to the diggings. If a bushman, who is generally mounted, perceives a man coming along the road with a better horse than his, he compels him to dismount and exchange horses, and in case of non-compliance, he makes nothing of shooting him.

"In going to Forest Creek, Campbell's Creek, Bendigo and Golden diggings, you pass through what is called the Black Forest, a dense and thick wood, about twelve miles in length. The other day, while four of us were passing through this forest, we found thirty-five who had been *stuck up*, and one poor fellow, who unfortunately had but thirteen shillings and sixpence, was tied to a tree and his body filled with shot, which they had fired at him, I suppose because he had no more. He was released a short time after, and is now in fair way for recovery. The much-boasted-of police will often turn away and make no attempt to stop such occurrences.

"The diggings present to the eye one of the strangest scenes imaginable. Hill and hollow, gully and stream, seem as if there had been a mighty convulsion of the earth, which had turned everything upside down, and this for full thirty miles. There are a great number of holes which are from seven to thirty feet deep, and for a long way the ground is undermined. You think you have found a solid plot of ground, and after you have dug eight or ten feet, the chances are that the whole fabric will give away, and drop into some undermined way."—*Cor. to An. Paper.*

THE TURKISH QUESTION.

Whichever way the Russo-Turkish differences are settled, and we are more and more encouraged by the hopes of a pacific solution, one thing is tolerably patent, namely, that the Turkish power is nodding to its fall. It would seem that this effete dynasty is a plainly moribund, and approximating the termination of its inglorious career, as the most obvious symptoms can make it. The drain of its pecuniary resources, as effected by the heartless conduct of the Emperor of Russia, will issue in what may be pretty confidently anticipated, a general insolvency; and the weakness of the Porte, and its incompetency to govern its own dependencies, has been made painfully apparent by the recent occurrence at Smyrna between an American and Austrian vessel, both of which had cleared for action, to decide a quarrel which, if it had taken place in the seaport of any Government entitled to the name, would have been summarily disposed of at the police-office. But the springs of Turkish power have been drying up for some years past; and if they escape absorption by the rough swab of Russia, they will, doubtless, find a discharge for the miserable remnant of vitality in a new State, which will probably spring up from a single or a combined nationality existing within her own nominal territories. Yellow slippers and Turkish turbans have begun already to do homage to the tailoring and *chaussure* of London and Paris, and another dynasty must soon, without a pun, step into the shoes of the Ottoman, and array itself in the tattered regalia which had been worn for 400 years by the Moslem.—*London Christian Times.*