



LONDON'S NEW TOWER BRIDGE.

"Come"

BY MARIANNE FARNINGHAM.

Who stands outside my door to-night,
And calls me by my name?
Because I am not true to him,
My heart is full of shame.
Why has he such persistent love,
That will not pass me by?
He has a host of other friends,
All worthier than I.

And yet I want him more and most,
Because I am not strong;
I have let slip the days of joy,
And half forgot their song.
And when he calls me to his side,
He knows I am not wise;
There is a hunger in my heart,
And tears are in my eyes.

He tells me in my Father's house
Is bread enough to spare;
Why should I perish in my need,
When he invites me there?
I will arise and go with him,
Who is himself the way—
And, lo! it is no longer night,
But dawn of perfect day.
London, England.

LONDON'S TOWER BRIDGE.

The highway over the Thames takes rank with the great engineering feats of the world. The bridge consists of three spans. The roadway is a lifting bridge on the bascule principle; that is to say, the two leaves rise in a vertical direction and are counterpoised on their inner ends. When ships are about to pass, the leaves of the lower bridge are raised, as shown in our cut, and the upper bridge is used. When ships are not passing the leaves are let down, and the lower bridge is used. The opening between the piers is two hundred feet. The leaves of the bascule or roadway bridge are moved by hydraulic machinery placed in suitable chambers in the piers. The centre of the pivot is thirteen feet three inches inside the face of the pier. The total length of each lifting part from the centre of the pivot to the end is 113 feet 3 inches. The short end is 49 feet 3 inches.

The steel skeleton of the bridge-towers is encased in masonry, that it may harmonize, so far as possible, with the neighbouring Tower of London. For foot-passengers, the two towers are connected at the top by two fixed spans; each of these spans is 237 feet in length, and consists of two cantilevers and a centre girder. The height of the columns of the towers is 119 feet 3 inches. There are three landings to each tower, the floors being of steel. The approaches to the piers are on the suspension principle, each chain being in two segments of unequal length. There are two hydraulic passenger-elevators, or "lifts," as our English cousins call them, in each tower, in addition to staircases. The ties forming the vertical wind-bracing have been put in such a manner that when the bridge is fully loaded with its dead weight all over, each tie has an initial strain corresponding to three and a half tons per square inch of section.

The weight of the opening roadway, added to that of the high-level footway and the towers supporting them, renders the load upon the foundation unusually heavy for a bridge of such moderate span. The foundations are carried down to the London clay, which forms the bottom of the bed of the river at this point, with a slight layer of gravel or river-mud above it. As it was determined to limit the load to the very moderate amount of four tons per superficial foot, the dimensions of the foundations work out to 100 feet in width and 204 1-4 feet from end to end of the cut-waters. Sir Benjamin

Baker has said that he does not know of any other bridge-foundations with such dimensions as those of the Tower bridge, except in the case of the Brooklyn bridge. The two main foundations in the latter bridge support a roadway of 1,600 feet span, or about the same as that of the Tower bridge.

In sinking the foundations for piers, eight rectangular iron caissons were used for each pier. The central bridge, as before stated, consists of two fixed and one opening span; the two fixed spans forming the high-level footway. The distance between the two piers is a little over 230 feet and the height in

the clear above high water is 140 feet. This limits the height of vessels passing under at high water; it is, however, sufficient for the purpose, for the Tower bridge is only a short distance from London bridge, which defines the navigable limit of the Thames for shipping proper—that is, vessels with masts that will not lower.

The bridge is near the famous old Tower of London, and connects Bermondsey, Walworth, Camberwell, and Peckham, on the south bank of the Thames, with the western part of the old city, on the north bank. According to the Lord Mayor of London, the bridge has cost the corporation over £1,000,000. It was begun in 1886.



BISHOP CROWTHER.

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As a boy the future bishop was a worthless little negro, living as best he could in the Niger Territory, in the wilds of Africa. His name was Edjal. He was carried off by Mohammedans in 1821 and was made a slave boy, and that meant a very hard life for him. But when people have a hard life to live they should live it cheerfully and try to be content with their position, however trying it may be. And especially is this the case with regard to slaves. It is not of much use for them to be obstinate or to fight against their position. It only brings fresh grief for them and harder blows. A slave that won't work cheerfully has a very hard life. And this was the case with Edjal. He was so cross and naughty all the time that his master got rid of him, but his new master found him no better, and he, too, was glad to sell him. And so he was passed on from one person to another. He was traded away once for a horse, and was returned a bad exchange, and another time was sold for a little rum and tobacco. Then the poor lad tried to kill himself, but God preserved him self from that great crime and his hard

life continued. He was sold to some Portuguese traders who made it much harder than it had ever been before. Slaves on board ship are packed away in the hold like pigs or sheep, and in this way poor Edjal was found by the British ship "Myrmidon" when looking for slave ships. He was rescued from the Portuguese and put on board the "Myrmidon," where he was treated kindly by the officers and crew. Poor Edjal! It was a new thing for him to be treated kindly. He was taught to be a Christian, and was baptized in 1835, under the name of Samuel Crowther, a clergyman living then in London, England. He was educated by the Church Missionary Society, ordained in 1848, and sent to do missionary work in Africa. Here he proved himself so successful that, in 1864, he was appointed and consecrated bishop of the Niger Territory.

While travelling about in his diocese, preaching the words of Jesus, he unexpectedly found his mother and sister, from whom twenty-five years before, he had been sold into slavery. This was a happy meeting for those two poor African women! Their poor little slave boy had become a bishop in the church of God.

Many people will feel great regret at the death of Bishop Crowther, for he had a great many friends in England. Whenever he visited there the people, some of the highest in the land, made a great deal of him; but the bishop was always modest and retiring, showing to all that wherever he might be his heart was in Africa among his benighted countrymen. In his work he was always brave, and would meet savage kings and chiefs like a true apostle. More than once he was seized, and his life placed in great danger, but God preserved him

through it all, till at last, on the 31st of December last, it pleased Him in His infinite wisdom to call him to Himself.

MOON MYTHS.

Many curious fables are told about the moon; one of the quaintest stories is found among the Greeks. A moon maiden, so the story goes, loved a shepherd lad, and often went to see him when he was tending his flocks. But he was taken away from the sky world one day, and though she sought everywhere she could not find him.

Being a brave, true-hearted maiden she did not spend the time in crying, but said, "Here are his sheep and lambs left without care. I will watch them, feed them, and give them water from the fountain until he comes."

So to this day, the Creek boys and girls say, you can see the shepherdess in the moon.

Among the Hindus they tell a moon story which is quite as pretty. One of their gods was said to have come to earth in the form of a poor man. While walking one day he lost his way and became very tired and hungry.

Finally he met a rabbit and asked food of him. The rabbit said, "I eat only grass, which is not fit for you." "I am very hungry," said the man; "but I cannot eat grass." Whereupon, the rabbit, in pity for the hungry man, said, "I am only a little rabbit, but you may eat me."

Then the man took the rabbit in his arms, saying:

"Little friend, you have offered yourself to a god; great shall be your reward."

And holding the happy little animal on one arm, he drew a picture of a rabbit upon the moon, and restoring the creature to the earth, said:

"There is your picture in sight of all men for all time, and you shall be remembered for ever as the unselfish rabbit."

And there he is still, at least so the Hindus say.

Bob White.

BY GEORGE COOPER.

There's a plump chap in a spockled coat,
And he sits on the zigzag rails remote,
Where he whistles at breezy, bracing
morn,

When the buckwheat is ripe, and stacked
the corn;

"Bob White! Bob White! Bob White!"

Is he hailing some comrade as blithe as
he?

Now I wonder where Robert White can
be!

O'er the billows of golden and amber
grain,

There is no one in sight—but, hark
again:

"Bob White! Bob White! Bob White!"

Ah! I see why he calls: in the stubble
there

Hide his plump little wife and babies
fair;

So contented is he, and so proud of the
same,

That he wants all the world to know his
name:

"Bob White! Bob White! Bob White!"

Many would be cured of sore eyes if
they would wear their glasses over their
mouths.

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