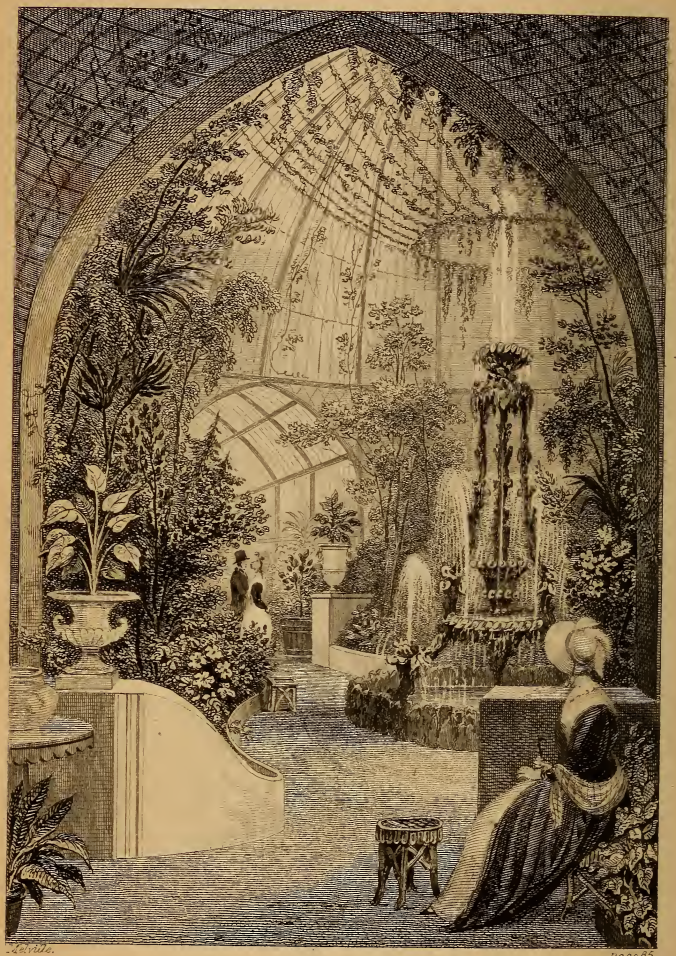


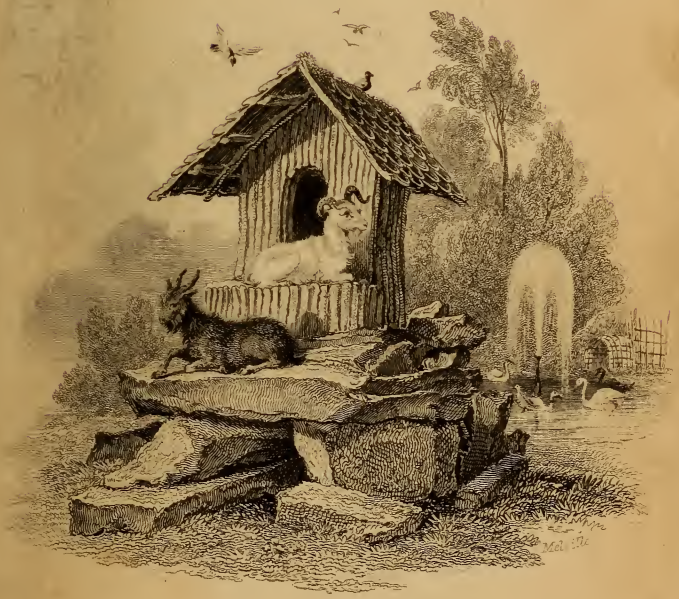
page 65.

COLOSSEUM

A MONTH

IN

LONDON.



ZOOLOGICAL GARDENS.

LONDON:
PRINTED FOR HARVEY & DARTON,
GRACECHURCH STREET.

A

MONTH IN LONDON;

OR, SOME OF ITS

MODERN WONDERS DESCRIBED.

By JEFFERYS TAYLOR,

AUTHOR OF "THE LITTLE HISTORIANS," "ESOP IN RHYME," "THE FOREST," &c.

LONDON:

HARVEY AND DARTON,

GRACECHURCH STREET.

Joseph Rickerby, Printer, Sherbourn Lane.

A

MONTH IN LONDON.

An elderly gentleman, of the name of Hazelford, was sitting one day at dinner with his two grandsons—Harold and Edward Vernon, children of his deceased daughter—when the sound of active feet, ascending the six stone steps before his door, attracted the attention of the young persons, and presently a sounding report from the huge brass knocker echoed through the house, which made even the grandfather drop his knife and fork, and look over his spectacles towards the door. Nothing was to be seen at present but the corner of a shaggy great coat through the parlour blinds; nor was much to

be heard for some time, but the riotous responses of trusty Yaffer, a favourite little poodle dog, whose fat sides shook vehemently, as he barked at this unusual disturbance of Mr. Hazelford's lone and quiet country-house.

Bridget, who could not move with quite so much activity as when, thirty years before, she entered service there, nevertheless paced the sanded kitchen, and the stone hall with accelerated steps, urged to unwonted speed by her own powerful curiosity. At length the spring-bolt was drawn back:—"Does Mr. Hazelford live here?"

"Yes, sir, certainly."

"Then tell him that Mr. Henry Hazelford of New York wishes to see him."

But the delivery of this message was so far needless; for the old gentleman had risen from table, anxious perhaps to know the particulars of this unexpected siege; whilst Harold and Edward neglected their plum-pudding, for some such reason. For a moment our venerable friend stood speechless: he replaced his glasses, and drew them off again, as if doubting their faithful-

ness in this instance. At length his grey eye glistened; his aged features showed strong emotion, and extending his hand, he grasped that of his visitor, and in a voice tremulous with joyful feeling, bade him an English welcome to his table.

There was a time, some forty years ago, when a great many people thought that they could live happier and do better in any country than in England; and that America, especially, was the land wherein restlessness would be certainly rewarded with tranquillity, and indolence with wealth. Our elder Mr. Hazelford had once a younger brother, who at that time could see nothing but a wilderness in the verdant hills of his own native country; whilst the golden glories of the western world seemed to be represented by every setting sun. He determined to remove with his family, and counted hours till his departure. At length he turned his property into money, gave up a neglected and then declining profession to his brother, and left his land, to see its shores no more. Change of climate, waste of means, the death of his wife and three chil-

dren, weakened by grief his strength of mind and body. He sunk into the grave in about seven years, leaving his only son, whom he had just placed with a storekeeper of New York, to inherit his diminished fortune and a part of his somewhat enlarged experience.

Leaving the friends awhile to talk over family and other affairs, on this interesting occasion, we will take some notice of West Hill House, the residence of the elder Mr. Hazelford. It was built of red bricks, and four-square, rather in the formal style, and had a heavy Dutch roof, with dormar casements, looking each way. Of narrow sash-windows, with very thick bars, there were two even rows. A projecting bow-window over the door was supported by sturdy oaken pillars, shaped out with some skill and care. The knocker before mentioned was a brass dolphin, whose likeness, however, had suffered a little from regular and frequent polishing. The hall was large, and had a spacious fire-place at the end; the wooden frame-work of which exhibited a curious specimen, in its structure and carving, of the tasteless ingenuity and perse-

verance shown by house-decorators about two hundred years ago. The staircase, spacious but heavy in appearance, was once grand. Spiral balusters and angular carved rail-beams, accompanied them from landing to landing; whilst the stairs themselves, of substantial thickness, were, like them, brightened by weekly labour, bestowed with wax and brushes, as on the furniture.

From the back-front of the house a pretty English view met the eye. The daisied pastures, with their numerous flocks and herds; the corn-fields, rolling onward their golden waves before the pursuing breeze. The more distant woods, reaching from a narrow point on the left, formed the principal feature on the next line of view. Then this dark green mantle was richly edged by the winding river, whose bright stream, like a silver band, divided the forest from the fields. Beyond, far beyond, in a clear day, could be discerned a pale blue streak, not much unlike those thin clouds which often hang in the horizon: that was part of the distant county of Kent. Then there was the dark blue sky, finely contrasted by dappled white clouds, which

floated high in the vast vault of heaven. These were some of the beauties of *nature*, and such always claim our first notice and regard; for the immediate works of the Almighty must always be more admirable and interesting than any thing which the hand of man can produce. Yet man has done much; and as the powers of mind and body with which he acts, are God's creation and especial gift, we do honour to Him still, if we thus reflect, when we admire a fine building, a canal, a piece of mechanism, or any work of art. From the upper windows of this house you might observe the course for many miles of a canal, which, now embanked in a valley, or delved through a hill, pursued its even purpose to the Thames. Four windmills twirled their busy sails in sight, whilst a distant column of smoke marked the passage of an engine-driven vessel to the distant Nore. Again, by leaning out a little, and looking the other way, the dusky cupola of St. Paul's might, in a very clear day, just be discerned. But the indications of London were more conspicuous after the close of twilight. The horizon gleamed with the midnight splen-

dours of the vast city. It was the mind of man that blazed forth there, and formed, as it were, a new luminary in the midnight heavens.

Mr. Henry Hazelford, though by long residence in America he had become naturalized to that country, so that he viewed with a sort of pride its rising greatness and unbounded prospects, retained also a considerable attachment to his native land, and viewed its institutions with admiration, and its prosperity with delight. He expressed himself on these points much to the satisfaction of his worthy host.

"The thing is," said that gentleman, "you are an Englishman born, and have not seen a better country, though you have travelled a good deal. However, we must not suppose that foreigners in general speak of it as you do."

"National partiality is too apt to blind the eye and pervert the judgment," said Mr. Henry. "I wish to be free from prejudice, but not from a national preference; and there is no harm if, in this latter point, we are influenced by family and local attachments—by a taste for manners

and circumstances to which we may have been used, without injury to the character. But the great thing still is, to go on enquiring, and laying by knowledge as we obtain it. What do you think has brought me across the Atlantic thus unexpectedly?"

"Some good purpose, I trust," said the old gentleman.

"My purpose is, sir, to inform myself, as well as I can, of the real progress of England in the grand improvements of the age; and as the metropolis of course presents the most striking and important specimens, I propose to spend a month in London."

"Oh, London! London!" said Mr. Hazelford: "forty years ago I thought I knew it well enough to tell all about it as I sat at home; but now, I reckon, it would be as strange to me as to those lads; for my infirm health has kept me long at home. I suppose you passed through it."

"Just so; but I had not a moment to spare for observation. Do I understand that these young gentlemen have not yet seen London?"

"No sir, no sir; we have not been yet!" was the dejected reply of the individuals referred to.

"Aye, the lads want to go," said Mr. H.: "and I think they should; but I know not how to manage it. I could not undertake to guide them there, infirm as I am, and they must not go without a leader."

The boys seemed wonderfully interested in the turn which the conversation had just now taken, and whilst the two gentlemen whispered together, their countenances expressed the peculiar animation of sudden hope.

"Why, now," said Mr. Henry, "it does so happen, that my design is to note down observations for the use of our youth at home, and I think I should be not a little assisted by the remarks made by such parties themselves. I have a friend in town, who will receive and help us all, strangers as we are, during our visit and enquiries. Say, sir, shall these young gentlemen accompany me?"

Mr. Hazelford deferred his reply for a minute or two; but his face indicated, as the boys

thought, a favourable conference with his own objections. Some of these he hinted at.

"Harold," said he, "you told me yesterday you had no money."

The lad's countenance fell, but he whispered his brother. "Edward has got five and sevenpence, sir, and he will lend it to me. I can borrow——"

"Hush! hush! *borrow* is a worse word than *lend*, which many have found bad enough. I think I told you, when you bought that parrot, that you would wish your money in your pocket before long; but again, who is to attend the bird in your absence?"

"Oh! grandpapa, I am sure Mrs. Bridget——"

"Ah! there is *borrowing* again;—first money, and then time of others."

But it was evident, to the keen eye of the personage addressed, that these difficulties would in some way be surmounted, for there was a good-humoured smile playing about the corners of their grandfather's mouth all the while. So I shall not detain my readers with the adjustment of objections and impediments, but merely in-

form them here, that in a few days after this, Harold and Edward found themselves in the coach travelling to London, with their American relative, each of the boys having a sovereign in his pocket!

To those who have passed the period of youth, and are frequently compelled to resign the green fields and blue sky, the quiet hours and rural pursuits of the country, for the crowded streets and harassing engagements of London, the approach to it by any road is disliked, as it leads to accustomed objects, and a gloomy day. None of the party in question, however, felt in this way, of course. As for our two young friends, only those who, like them, can remember visiting London from the retirement of the country for the *first time*, will be able to realize their sensations. All that has been said or read, taught or thought of the great city, tends to an enhancement of the still visionary idea; and this, cherished in the warm imagination of a child, and uncorrected by a single glimpse at the *fact*,

grows almost to the notion of streets a mile wide, houses as large as a street, and public buildings reaching to the clouds.

The repeated questions, "Is this London? is this London?" as our party drove through Stratford, Bow, and Mile-end, could scarcely be replied to by their American friend, who could not be supposed to know that which residents cannot exactly point out—the line where those once villages end, and London really begins. A gentleman travelling with them, however, possessed a store of information on matters of the kind, and seeing how the case stood, he very obligingly gave the enquirers the benefit of his knowledge.

"We are now passing Whitechapel church," said he, "and may fairly call ourselves in London, though still some way from the bounds of the ancient city."

In an instant, a strange apparatus of mental scenery was removed from the imagination of our juvenile travellers: they plainly perceived that houses were *only* houses, and shops were only shops, and few of them so showy as those of

a rural town on a market-day. They also discerned that tiles were tiles, and bricks were bricks, notwithstanding the coat of soot and dust with which they were invested.

"What do they colour houses with here?" was the simple enquiry of Harold: "they are neither white nor red."

The Londoner smiled.

"I shall learn something of town myself, I find," said he: "we cover our walls with a different composition from that used for a country-house. It comes cheaper too, for it is done by the smoke from a few chimnies; which, if you have time, you may notice and try to count, from the top of St. Paul's. Our houses are nearly all of brick, and are roofed generally with tiles."

And now the slow progress of the stage amongst the hay-carts, gave opportunity to observe the utmost splendours of the butchers' shops on the left-hand side.

"Oh! Edward, there are three, four, five, butchers' shops all in a row! stay, six, seven! I cannot count them. Look! look at that

man with a white cap and a long beard! Where are we?"

The coach now turned suddenly across the way, and entered, with rattling violence, the narrow gate-way of the far-famed Bull Inn, Aldgate. It is well that the friendly Londoner was by the side of the too curious Harold, who leaning out, was near a dreadful accident, which has occurred before now—I mean, the fracture of the head against one of the side posts at the instant of passing them! The boy was pulled down by the gentleman with a force only equal to the occasion. All were alarmed, all felt thankful, and none were hurt. Let this be a caution to others who may not have an experienced person at hand on the watch for their safety.

"What a smoke! what a dark morning!" were the first observations of the lads as they stepped out of the coach.

At this instant the stranger, who had previously alighted, was accosted in the yard by the name of Finsbury. Mr. Hazelford could not help starting a little, which Mr. F. observing, said: "It strikes me that we ought to know

something of each other. My name is Henry Finsbury, of the city."

"Then am I saved some uncertainty," said the American, "by a most interesting coincidence of events. My name is Hazelford of New York!"

"That is as it should be. I am heartily glad to see you," said Mr. Finsbury. "Glad!" added he, pressing his hand: "I ought to say thankful, for the opportunity of showing that I have not forgotten a friend who proved himself nobly such many years ago."

"It happened," replied the American, "that I could serve your turn and my own at the same time, on the occasion to which you refer. I performed an act of justice, and have received the reward of an act of generosity, in comparative prosperity, ever since."

Whilst the party thus pleasingly brought together were at breakfast in the inn, Mr. Hazelford explained the general purport of his visit, and was by no means mistaken in his expectation of a ready welcome for himself and the lads, to the house of Mr. Finsbury. That he had a

house and comfort about him, was indeed owing to an act of conscientious rectitude in Mr. Hazelford, in an affair which placed the power to do an important *wrong* in his hands. He chose to do *right* to his own disadvantage. It is not wonderful that such conduct, amidst so much of violence, injustice, and narrow selfishness, as we find in the world, should obtain the name of *magnanimity*. We have, however, nothing further to do with these incidents on the present occasion, than to explain by them, the nature of Mr. Finsbury's circumstances towards his American friends. In a short time the party, now consisting of four persons, found themselves at that gentleman's residence, near the Bank.

And now some of our readers may be aware, that one day in London, to those who visit it for the first time, presents more novelties and objects of interest, than could possibly be described in a little book like the present; and if we are to note down all that was remarked, asked, and replied to, in the case of our juvenile spectators, it is evident that we should not get through a morning's walk in the space herein allotted for a month.

We cannot, therefore, attempt to accompany Harold and Henry with their friends, except on certain occasions, and when they are visiting objects of primary, and rather novel interest at present in London:—things which mark the progress of British genius, enterprise, and knowledge in our vast metropolis. These, as we are already informed, were the chief matters of enquiry and attention with the American visitor. The ancient objects of interest were, however, not neglected; but these have most of them been described in works with which our readers are at present acquainted. In attending therefore, as we shall chiefly do, to things which form the features of *new* London, we shall begin with perhaps the greatest wonder, which is,

THE THAMES AND THE TUNNEL.

Harold and Edward were so completely at a loss to conceive what sort of a thing this *Thames Tunnel* could be, that they looked in a dictionary previously to setting out, in order that they might not appear quite so ignorant as

on some former occasions, and as they really were. But, somehow, Dr. Johnson had not dreamed of the thing in question, apparently, for he afforded no explanation, or even hint, which could give the lads the idea of the thing they were going to see; so they kept their curiosity to themselves pretty well, as they proceeded through the numerous and narrow streets leading to that part of the river. At length they alighted near a narrow passage, at the entrance of which stood three or four men in sailors' jackets, who seemed to have given a pretty good guess at the purpose of the visitors, by their solicitous repetition of—"A boat, sir!" "A boat, sir!"

"Aye, a boat, if you please," said Mr. Finsbury; "and a dry one, if convenient."

The waterman shot like lightning down the alley, and immediately after was heard giving orders to a boy to make ready his *scull!*

"His scull!" repeated the boys, with amazement.

"Yes," replied Mr. Finsbury, drily; "we are to sail over the Thames in the waterman's

scull! People in London, you see, have sometimes strange things in their heads."

By the time our adventurers were seated in the narrow, slight vessel destined to receive them, they understood that a boat of that sort, rowed by one person, is called a *scull*, or *sculler*, on the river. Neither of the lads had been in a boat before. The only voyage they had ever performed, was across a pond near their grandfather's residence, in a flat brewing cooler, which had been placed there to close its cracks. A garden-spade was used on one side for an oar, a large kitchen shovel on the other; both which instruments of navigation found their way to the bottom in a very few minutes. Expeditions of a like kind were ever after forbidden by the higher powers.

Our American friend was indeed struck with admiration, at the finest sight which the first metropolis of Europe has to show—the river Thames, with its shipping and adjacent objects.

"How many times," said Mr. Hazelford, "have we heard and talked of this far-famed

stream. By Englishmen extolled as the pride of Europe—by Americans scorned as a petty rivulet, compared with many rivers of the western continent. But without exaggeration or prejudice on either side, it is in itself a magnificent sight. How much more so with its floating forest of vessels, its crowded banks towering with the works of a great nation, its elegant and expansive arches!

As for Harold and Edward, surprised and delighted as they were, they had not, as mere youths, knowledge enough to comprehend fully the real extent and magnitude of the objects before them. The river indeed appeared like the sea to them, and could scarcely be discerned as longer than it was wide. Mr. Finsbury, understanding that a little information would be agreeable, during their passage, supplied the following particulars, which perhaps may be new to some.

" Father Thames obligingly travels two hundred miles to assist Britons in their commerce. He finds his way at first as a rivulet in Gloucestershire; not to the Severn, which would be a

near and ready outlet; but through the heart of England to her eastern shores. At first he has the advantage of running down hill, by a pretty brisk descent; but from Brentford to the Nore, a distance of sixty miles by the river, the real fall is only seven feet—not an inch and a half to a mile!"

"He stays the longer, that he may do the more good," observed Mr. Hazelford. "He has certainly opportunity thus to expand himself in the plain, for such I suppose the site of London may be called; thereby assisting more leisurely and extensively the operations of man. Waterman, how far down the river does the shipping stand thus?"

"From London Bridge to Deptford," was the reply.

"And whether these are our own vessels or foreigners' it matters not," continued Mr. Finsbury, "they all bring '*grist to our mill*,' as the saying is, and increase the commerce of our metropolis. The southern banks are lined with manufactories and warehouses, whilst on the northern side, national structures connected

with the port—such as the Tower for its defence, the Custom-house for the transaction of government claims on the shipping, and docks for the construction and reception of vessels, fully testify the grand importance of this river."

"Where do these ships sail to?" was the enquiry of Harold.

"To every coast which has a name upon your map, I might almost say," replied Mr. Finsbury. "At least, I am safe in asserting, that this river has borne upon its bosom vessels which have visited, at some time or another, every peopled strand that can be mentioned. I perceive that we are now near the stairs; but have time for the lines of Pope on this subject.

> 'From his oozy bed
> Old Father Thames advanced his reverend head,
> His tresses dressed with dew, and o'er the stream
> His shining horns diffused a golden gleam.
> Graved on his urn, appeared the moon that guides
> His swelling waters and alternate tides;
> The figured streams in waves of silver rolled,
> And on their banks AUGUSTA rose in gold!'

"It is time now," said Mr. Finsbury, addressing the lads with a very serious face, "to

inform you, young gentlemen, that the boat will not render its assistance much longer—we must GO UNDER!"

"Go under!" repeated the boys, with much alarm. "Oh, sir! are we sinking?"

"Not exactly so, at present; but I feel persuaded that in a few minutes we shall be many feet below the surface!"

The lads eyed the waterman, but he only looked unusually cunning, that was all.

"Let us hope that all will end well," continued Mr. F. "I have heard of persons rising after a time, and being dry and well in a few minutes. Have not you, waterman?"

"Why, yes, sir, that's true," said he, winking; "but I knowed some as got more than they liked on't once, in that very place where you are going, and when they had thought all was safe."

But the boys, seeing that Mr. Hazelford, so far from appearing uneasy, could scarcely restrain his mirth, took courage, and thought that somehow they should live to see the wonder out.

"I think you are laughing at us, sir," said they.

"Am I? Look at me," said Mr. F. with a face of undeniable gravity. "Stay: let us take care of ourselves as long as we can."

The boat was now paddled chiefly with one oar, until it approached a parcel of boats lying at the foot of some stone steps. With much skill and address it was pushed, pulled, and wedged safely amongst them, until the waterman sprung out, and making fast the little rolling vessel, extended his sturdy arm for the assistance of his passengers in landing.

"We are not under yet," said Edward, exultingly, as he and his brother gained a footing on the stairs.

"We shall be very shortly, and that you will confess," repeated Mr. Finsbury.

"Yes; but not under *water*," retorted Harold, "or else we could not confess any thing at all about it."

"Under water *you shall be*," insisted Mr. F. at the same time seizing him, so that he really expected a ducking.

The whole party, however, proceeded from the stairs to a small door, having the words,

'Tunnel Office' upon it. The words seemed to the lads to have an air of dread as well as mystery about them, and they followed in anxious silence.

"Have a little mercy," whispered Mr. Hazelford.

"I will have a great deal presently," whispered Mr. F.

They now ascended a flight of steps, and found themselves in a building occupied by vast machinery. They then descended, I know not how many separate flights of wooden stairs, down a sort of well, as it seemed. At the bottom an astonishing sight presented itself. The archway, whose length the eye could not measure, was wide enough to admit a coach and horses. It was supported by prodigious piers on one side, and by a curved wall on the other, and lighted by brilliant lamps, at regular distances, and traversed by several gay parties: it so amazed the lads that they quite forgot their late alarm.

"Now what do you say to being under water?" asked Mr. Finsbury.

"Where is the water?" enquired the lads.

"Over your heads, as truly as the earth is under your feet."

The look of mere perplexity on the countenances of the boys, showed plainly that the time was now come for the intended explanation.

"A tunnel," said Mr. Finsbury, "is a hollow, artificial passage for smoke, fluid, or any thing else; and this is one dug under the very bed of the Thames, and which was designed, instead of a bridge, to form a communication from one side of the river to the other."

"Then the Thames is really above us!"

"It really is; and so may an Indiaman be, for what I know. A subterranean, or underground passage, is by no means a new or uncommon thing; but one *subaqueous*, or under water, has never been carried on to this extent."

"I perceive that Englishmen," said Mr. Hazelford, "though living under an old government and ancient institutions, and surrounded by venerable remains of the disused works of man, are not themselves superannuated yet. But one may well enquire for the utility of this, in its present state."

"Why, certainly," said Mr. Finsbury, "it is nothing better than Turn-again-lane, to any one now. John Bull is afraid *to sink* any more of his money."

"What is that dark place under the arches, on one side?" enquired Edward.

"That was intended for passengers going the the contrary way. It is not fitted up, and so is not exhibited."

"And when was it begun, and when will it be done?"

"I can answer the first question, but not the second," said Mr. F. "The history of the Thames Tunnel is, I believe, shortly this:—

"About seven years ago, Mr. Brunel, a celebrated engineer, proposed the plan, which was, to make a way from one side of the river to the other, where it is a quarter of a mile broad, and at a distance of a mile and a half from London Bridge. He calculated that he could make an underground tunnel for less than a quarter of the expense of a bridge, and that the traffic, when done, would yield a large profit. He got others to think so too. A large sum of money

was subscribed, and in March, 1825, the foundations were lowered, of the well, or shaft, as it is called, by which we descend. For some time all went on as well as could be expected, though continual difficulties occurred; but at length a very disastrous day disconcerted the excavators. The Thames burst through from above, and drove them from their work."

"You are speaking of the first irruption, I suppose," said Mr. Hazelford.

"I am. The aperture, however, was repaired, the water pumped out, and the undertaking proceeded. But, alas! a short time after, the misfortune recurred with far more serious results. It was, I believe, in January, 1828, that Mr. Brunel, who was on the shield or framed roof, made for the protection of the workmen, discovered the water oozing through rather faster than was usual. I believe that sufficient notice was not taken of that solemn warning; for the men continued their labours until an immense mass of earth was forced into the tunnel. The water rushed with such impetuosity, that the force of the driven *air*

knocked one man down, and extinguished the lights. The noise created by the torrent of water was tremendous, and deafened the ears of those present. Mr. Brunel, with several men, was thrown down, and got entangled in the wood-work; whilst others, dashed with violence against it, or unable to gain the surface, perished. Six thus lost their loves. Mr. Brunel, who seems to have acted with great courage and humanity, swam out, and was carried by the rush of water some way up the stairs.

"Thus was a stop put suddenly to this splendid undertaking. The work is now entirely at a stand. A brick wall has been built at the further end, to prevent accidents there. I understand that they want £100,000 to set them moving again; but there are few hopes now of raising any such sum on this speculation."

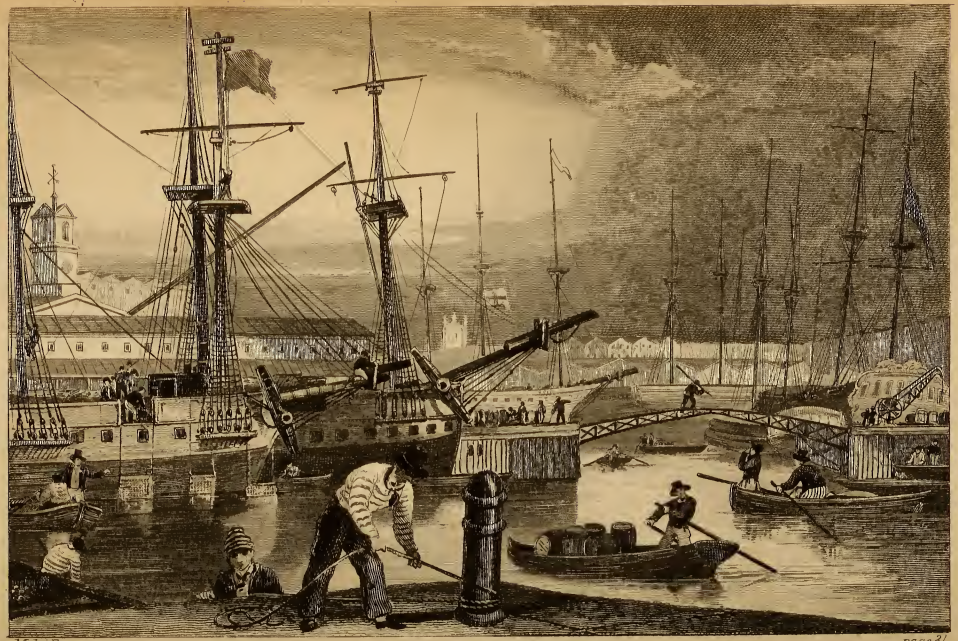
"Pray, sir, how did they stop the holes which the river made for itself?" demanded Harold.

"It was a difficult business, I assure you," said Mr. Finsbury, "and occupied the minds of many beside the engineer. The plan at last

was this. They dropped down from barges, large and innumerable masses of clay, and clay in bags, and gravel. Then a large, flat, wooden raft was sunk, to prevent those materials from moving. It was some time, however, before they could so far stop the leak, as to get rid of the water in the Tunnel, even with the aid of the stupendous steam-engine, which pumped it out; but the mischief was remedied at last, though the public confidence has never been restored to the grand but unfortunate project."

The attention of the company was now drawn to a beautiful representation of the Tunnel, as if completed, exhibited by an ingeniously illuminated lantern. The effect was so skilfully managed as to impose upon the eye a mere illusion, for an absolute fact of vision.

And now the curiosity of our enquirers being pretty well satisfied, they returned to the upper regions of things, and found the light of day no unpleasant change from the gleams of the gas-burners in the Tunnel. The party not feeling fatigued, after re-crossing the river



Melville. page 31.

ST. CATHARINE'S DOCKS.

in a boat, proceeded on foot, that they might view St. Katharine's Docks, and the new London Bridge, on their way home.

It was evident, from the conversation and manner of the two lads, as they left the Tunnel, that an impression had been made on their minds which time would not speedily erase, and that new sources and currents of thought had been opened, which were likely to bring in a continued series of new ideas with a necessary influx of knowledge.

"Do you hear how those boys are talking about it?" said Mr. Finsbury, aside to his friend. "How much do those parents lose of easy advantage to their children, who spare the shilling for such sights as these, and spend the guinea on amusements which, *if* harmless, do them no good."

"Those boys," replied Mr. Hazelford, "will henceforth have an entirely different notion of the possibilities of human effort, and will spring a dozen rounds on the ladder of knowledge, during this month in London. I suppose we are now at the docks in question."

"We are," said Mr. Finsbury: "and we must explain them as well as we can; but the object is not so simple, and intelligible, and interesting, perhaps, at a glance, to youths of their age; though they really are superior to many in taste, quickness, and intelligence."

"What is this place? and what is it for?" was the two-fold demand of our young friends, on entering the works.

"Do you know what a dock is, Harold?"

"A tall weed with a long root and large leaves, which grows in a meadow."

"And yet I see no such things here, though these are the largest docks in England. But come: I have taken your jest—now favour me with your earnest."

"Well, then, a dock is a place for ships, sir."

"So is the ocean. Now attend. Take care of that truck, which might force you over the coping. Ships, you know, are large buildings which cannot be constructed, like others, on a spot to be occupied by them when in use. Men could not well put a vessel together on the

water, nor could they move it far by land-carriage; so a place is contrived by the water-side which allows the water to be excluded for building. These docks, however, are intended as an artificial harbour for vessels to enter, and deliver and receive their cargoes. See now the action of one of the cranes constructed for this purpose. Those hogsheads of sugar—how would you go to work to lift them out?"

"I would pull them out with ropes," said Edward.

"Pull yourself in, rather," said Mr. Finsbury. "No. hands will do nothing here till the *head* has first worked. Here, you see, is an overhanging beam of vast strength, fixed to an upright one, which enters the earth, perhaps twenty feet, and is enclosed in a socket prepared for it, which allows it to revolve; then, by passing a chain over a pulley at the further end, and coiling it round this roller, the object would be accomplished by hooking the goods to the chain, and turning the roller. But the strength of a dozen men would scarcely do this without some further mechanical assistance. That roller, you

see, has a large iron wheel with strong cogs fixed to it. Now don't you see, that the winch is not fastened to this, but to a much smaller toothed wheel, which is engaged with the larger one. Now two men can work it, because the winch acts as a powerful lever in their favour. That clinking noise is caused by a catch, which allows the cogs to pass that way, but which would prevent their running back, in case the men should lose their hold; otherwise the winder would fly against them, and give a fatal blow."

"Oh, there it comes! there it comes! But how slowly!"

"Yes: it is a law in mechanics, arising out of the nature of things, that as we gain power we lose time; but then in this, and a hundred other cases, the time is in fact saved another way, by doing that in five minutes with a machine, which might take as many hours by manual labour. By losing time, therefore, here, we only mean that the roller does not turn round so fast as if the winch were to revolve as it now does, and were applied to its centre; so far, however, from circulating thus, it would be

found that human arms could not move it at all. Now observe that the hogshead being at a sufficient height, the whole concern winds round, and brings the goods to land, where they are lowered as wanted. So much for this sort of crane. But here we come to a machine of a far different sort: it finds its own labourers, and has the power of two hundred horses!"

The stupendous steam-engine for filling and emptying the basin of the St. Katharine's Docks, could not possibly be so surveyed by our young friends, during their brief visit, as to be fully comprehended by them. Far less is it practicable, by mere description, to put our readers in possession of the nature of its complex mechanism. Mr. Hazelford, to whom this grand invention was familiar, kindly supplied a few general hints, however, to the young gentlemen, which may be useful and interesting in some degree.

"Here," said he, "we see the power, not of muscle, but of mind;—mind which, perceiving a potent agent in an air-borne cloudy vapour, and applying its force to iron beams and bars,

accomplishes results which seem like the work of the elements themselves."

"By this engine," observed Mr. Finsbury, "water enough is pumped into these docks to float a hundred and fifty vessels."

"Which the tide probably would not do under some hours," continued Mr. H.

The lads were now engaged with their friends in examining, as far as they could advantageously and with safety, the general forms of the machinery. As they were retiring, Mr. Hazelford continued:—

"For ages, the vapour was suffered to escape unheeded, from the culinary vessels even of enlightened, enterprising, and scientific nations. The kettle boiled, and what then? The wisest old dame never thought that the steam was capable of turning her spinning wheel, or beating up her plum-pudding; nor were the old women, in these respects, more ignorant than the men; for all looked on, and neglected to make any use of the gigantic powers before them—I say, any *use*, for play-things, or philosophical toys actuated by steam, were invented at least by one of the

ancients. Hero, of Alexandria, who lived more than a hundred years before the Christian era, describes a machine made to revolve by the force of steam; but it is merely its *puffing* force which is exercised, and the machine performs nothing by its action. Some others, in later ages, varied the thing so as to obtain a somewhat different, but still a *useless* result. The Marquis of Worcester was the first who contrived a method of bringing steam into action as an *important* mechanical mover; though by no means the first who discovered the principle, as he and some others have erroneously taught. I believe his first exploit was the bursting an old cannon."

"As that can be done other ways," said Mr. Finsbury, "and is seldom desirable, we do not *canonize him* for that."

"Certainly not," continued Mr. Hazelford, "nor even for the next result of his experiments, which was something better. He undoubtedly applied the power of steam so as to raise a column of water forty feet. By little and little, and at considerable intervals, ingenious men proceeded with steam mechanism. Dr. Papin, a

Frenchman; Captain Savory; Newcomen, a Devonshire blacksmith; and many others, hammered at the same thing. It remained for James Watt, a mechanician of Greenock, to construct an engine capable of application to general purposes. We cannot attempt to follow him amongst his innumerable difficulties; but may perhaps understand the great principles of steam-engines, as contrived by him, and which are, with a few improvements, in use at present. A vast boiler is employed to contain the water, which is heated until it passes off rapidly in steam. But this steam, which, if accidentally resisted, is capable of bursting metal, however thick and strong, into a thousand pieces, is accommodated with one way of escape, in which is fixed the apparatus which it is required to move. Do you know what a pop-gun is, young gentlemen?"

"Oh yes!" said Harold, "I do; and I shot a paper bullet by *mistake* into Edward's eye once, when he said I could not shoot at a mark."

"*He*, then, I should think, knows also what a pop-gun is. Well, the bullet or pellet, you

know, is forced from the further end when you insert the one nearest you by the power of compressed air. Now the steam from an engine-boiler is made to pass into a cylinder or tube, which I will compare to that pop-gun, whilst your rammer, which I will suppose to have a well-fitted pellet *fixed* to its end, shall be the *piston*, as it is called, of the steam-engine. If then the steam, which you know is in a hurry, and *will* go out somewhere, is admitted beneath that piston, the lower end of the pipe being sealed, it must drive the piston, and whatever is attached to it, upwards. There is one stroke gained. Now, if we can manage suddenly to condense this steam, by bringing it into contact with cold water, there will be neither steam nor air to occupy the place. A vacuum is then occasioned, and the piston will descend with vast force in consequence. That is the second stroke. I admit a fresh puff of steam immediately—the piston ascends; I condense it—the piston falls; and thus I can go on, so long as I have fire and water to work with. The steam is called *the maintaining power:* this is the

grand thing. When once we have got a mover, it will be comparatively easy to attach things to be moved in the form of lever-beams, crank-wheels, and so on, until we can raise a rock from its foundation, or untwist a spider's web!"

"As to the power and use of these engines in Great Britain now," said Mr. Finsbury, "it can scarcely be calculated. There are at least ten thousand of them at present at work in this country, performing a labour more than equal to that of two hundred thousand horses, which, if fed as usual, would require a million of acres of land for their subsistence, which land would maintain one million five hundred thousand human beings! An ingenious foreigner has calculated that the great pyramids of Egypt might be raised in blocks from the quarries, and built in that form by this amount of power, in eighteen hours! and he reckons, at the same time, that the same work must have taken the labour of one hundred thousand men for twenty years. So much for the STEAM-ENGINE. Without the enormous one placed here, these docks would be nearly useless: it is necessary that the water should be

changed in or out at pleasure. These docks have cost, I believe, a million and a half of money. They cover twenty-five acres of land; and remember, they can accommodate a hundred and fifty vessels, and I believe were built in less than twelve months by one thousand men. We will now pass over this bridge."

Here another novelty was experienced. Whilst the party were engaged in their observations, Harold exclaimed: "Oh, Sir! where are we going? We are all riding somewhere!"

It was even so: the bridge parted in two in the middle, and the part on which our party stood turned round with them and several other persons; the opposite half turned as well, and no means whatever appeared of passing over the water. It happened, though, that to a vessel beneath, the circumstance was highly convenient; for it enabled her to pass into the docks without any trouble in lowering her masts. When this was done, the bridge again began to move: the halves slowly returned, and met each other with a jerk; the foot-way was again complete, and the passengers proceeded as usual.

"That," said Mr. Finsbury, "is called a *swing bridge*. A most ingenious contrivance it is: the intention of it I need not explain. It is moved sometimes by a winch and wheel-work, and often merely by a long beam used as a lever or handle.

LONDON BRIDGE.

Although so much had been seen in one morning by our travellers, yet, as the Old and New London Bridges were so near, and lay almost in their road home, they determined to pay them a visit now by means of a boat, which would give them a water view of those interesting structures. Passing the Tower of London and the new Custom House, of which, if we have opportunity, we may speak on a future occasion, they soon came in sight of that venerable fabric, which for centuries formed the only road communication for the metropolis with the other bank of the river.

As they approached, Mr. Finsbury pointed out the starlings or projecting piers, which were intended to protect the fabric from the weight and violence of the stream.

"There are those living," said he, "who can remember tall houses built on those foundations, which formed a street of busy shops on the bridge itself. They were, however, a great incumbrance to the bridge, and a hindrance to its thoroughfare: they were therefore removed many years ago."

"We certainly have better bridges than this in America," said Mr. H. "Your architects, I think, had little skill then."

"It was built in the twelfth century, my dear sir; at which time I have some doubts whether your American architects had better skill to show."

"Why true: you have us there, certainly. I rather think too that the Hazelfords had little to do in the western world at that time: nay, for any thing I know to the contrary, *our* ancestors helped to rear the very bridge before us."

"And mine might have had a hand in the job also," said Mr. Finsbury; "so we will share the praise and blame between us—I taking the former, and you the latter, by which arrangement the largest portion falls to you!"

Mr. H. took off his hat and made a low bow. "Sir, I thank you most profoundly."

The lads smiled, and all proceeded to the nearest stairs, by which they landed, and gained admission within the enclosure belonging to the works of the new bridge, which was then unfinished.

"The building, though incomplete, is too far advanced," observed Mr. Finsbury, "to show us much of the process of this sort of architecture now. They have, I see, nearly done the parapets and paving. Now, friend Hazelford, will you talk about excelling us in the bridge way?"

"Certainly," replied Mr. H. "for I now have a much better view of the deformity of your old bridge close by: but that we have criticised already. This is a noble work for human heads and hands, on which we stand."

"We must not forget," said Mr. F. "that this structure extends very far on arches over land as well as water. The approaches will be so managed as to make little or no rise on the bridge itself. For this purpose, streets and churches have been taken down, and a road

thrown up, under which the thoroughfare of Thames-street now passes. This bridge was begun in the spring of 1824.

"Then they have been seven years in building it!" said Edward.

"Do you think that long?" enquired Mr. Finsbury. "When we have noticed the other bridges, which we can do as we stand, we will talk a little of the mode of proceeding. But now let us turn our eyes westward. Compare that, which is Southwark Bridge, with the Old London, and then see what a difference modern taste, science, and money, have made. Say the length of time between the two erections is five hundred years."

"How ugly London Bridge looks now!" observed the youths.

"It is unsightly and dangerous," replied Mr. F. "and will not much longer annoy us. My lads, tell me if you see any thing remarkable about Southwark Bridge?"

"It is remarkably pretty," said Harold.

"Yes," said Edward; "but I can see through cross bars over the ends of the arches. Oh! it is very different!"

"So it is," said Harold; "and the arches have quite another shape: how flat they are!"

"Those are the particulars chiefly observable from hence," said Mr. Finsbury: "that is a *cast-iron bridge*."

The lads seemed hardly to comprehend that this could be the case.

"The *piers* are of stone," continued Mr. F. "but the arches are of iron, cast in innumerable pieces, each of the exact shape to fit in and support the structure, and, in fact, the whole was set up at Rotherham in Yorkshire. The width of the middle arch is two hundred and forty feet: the others are two hundred and ten each. It is the most stupendous bridge of the kind in the world. The weight of the iron alone is five thousand three hundred and eight tons! The ends of the piles (which we will explain presently) are forty feet under water. It was five years in building, and cost eight hundred thousand pounds!"

"How many more bridges have you?" enquired Mr. H.

"Four," was the reply: "Blackfriars, Waterloo, Westminster, and Vauxhall, making six bridges, for one, which served our ancestors.

Blackfriars we just see over the Southwark: it was built, I think, about seventy years ago. It is reckoned ornamental, but I believe is somewhat insecure. Waterloo Bridge surpasses all in extent, elegance, and magnificence: it is placed at the bend, or elbow of the Thames, where it is one thousand five hundred feet in width, and stands on nine beautiful and equal arches of a hundred and twenty feet span. The whole length, with the approaches, is more than three quarters of a mile! If I am not mistaken, the cost was above one million two hundred thousand pounds."

"Who pays all the money for these bridges?" asked Harold.

"Most of these, and similar public works for national convenience, are paid for by *a company;* that is, a number of persons agree to pay so much money for a share, or shares, in the concern, which it is supposed will be a profitable one, of course. I believe, however, there is not one in ten of these speculations that benefit any but the public at large: often the real subscribers to the undertaking are ruined.

Waterloo Bridge, I understand, does not pay one per cent. London Bridge has revenues of its own, which are abundantly sufficient for repairs or rebuilding. Westminster Bridge was built by a Frenchman about ten years before Blackfriars: there is nothing very remarkable about it. Vauxhall Bridge is a recent erection, composed partly of cast-iron, but not exactly on the principle of the Southwark."

By this time the morning was nearly spent, and our enquirers being somewhat fatigued, postponed the view of any further wonders until another day. In the evening Mr. Finsbury gave the youths the following information respecting the construction of bridges.

"When a bridge," said he, "can be accomplished by a plank thrown over the stream, and a few stakes driven in, the wonder is not very great, nor the labour or skill remarkable. But what is to be done when the stream is far too wide and deep for such means and materials? How do you suppose those piers were built, their foundations being many feet under water, young gentlemen?"

"I suppose," said Harold, "that they first dropped the large stones out of ships into the river, and when they were high enough, perhaps they might begin to build regularly."

"And so you think," said Mr. F. "that those beautifully regular arches, and that immense weight, required nothing better for a foundation than a loose heap of stones, dropped as near as they could guess in their proper places? No, no, men might in that way choak the river up, and send it through the streets on each side; but a bridge could not thus be built. The ancients sometimes turned the course of a river for a while, in order to give them access to the foundation for their bridges, but generally, the modern plan is to drive a double row of piles or stakes round the spot the pier is to occupy. The intervals between the piles are then rammed full of clay, so as to form a complete walled enclosure. The water in the middle is then pumped out, and so they arrive at the very bed of the river, which is as convenient for their operations as any other piece of ground. These enclosing

and excluding walls form what is called *a coffer-dam.*"

"Then the workmen have a high wall of water all round them?" observed Edward.

"Exactly so. And what do you think they first begin to build with?"

"Great square stones," was the reply.

"No," said Mr. Finsbury; "the bed of the river is in general of too soft a nature to be trusted with the prodigious pressure of a bridge pier. A more substantial foundation must be prepared; and for this business they usually employ several *monkeys.*"

"Oh! dear sir, you are joking with us!" exclaimed the lads.

"No, indeed," said Mr. F.; "and it would be to little purpose you should joke with them. They are amongst the most useful of the name; downright hard-working ones, who readily obey the direction given them, and this certainly in a very striking way."

Harold began to look very arch; and to solve the enigma, if any, at once asked if the monkeys in question would really *crack nuts.*

"Undoubtedly," returned Mr. F.; "I know of no monkeys which could perform in that way so completely. But now, to set the jest on one side, the case is this. Long and strong timbers, sharpened and pointed with iron at one end, and having an iron ring or collar at the other, are driven perpendicularly down, side by side, so as to fill up the space on which the pier is to be built. Now, the knocking those wooden giants down is not to be accomplished by one's fist or a sledge-hammer; a block of iron, therefore, of vast weight, is raised by machinery over the head of the pile, and when perhaps twenty feet above it, is suddenly released, when it descends with so much force, as to thrust the timber visibly downwards. This operation is repeated until the timber is sunk to its proper level. Now the block-*head*, which performs thus the office of a hammer, is called by engineers *a monkey:* the whole machine is called *a pile-engine;* so, when these timbers are driven down as close and as low as they will go, their tops are sawn level, and on this surface of timber-ends the superstructure is raised."

"How wonderfully are the ingenuity and assiduity of man exhibited by that process!" said Mr. Hazelford. "It takes hours sometimes to drive a pile a foot or two; yet at last it goes, and so must its many neighbours, in compliance with the designs of human science."

"The use of this pile-system may, I think, be shown thus," said Mr. F. "A nail may be driven into a deal board by *blows* from *a hammer* weighing perhaps scarcely twelve ounces; but if you discontinue the blows, and wish to drive the nail by mere pressure, you will find that a hundred times that *weight* applied as such will scarcely be sufficient to move it further in. The term *monkey*, as applied to the driving-block for piles, is borrowed, I think, from sea language. I believe that, in modern bridges, the tops of the piles are covered with a platform of boarding"

"And now," said Mr. H. "let us hear what our young architects would do next towards the erection of a bridge."

"We must build the piers high enough," said Harold, "and then *spread* them over to make the arches."

"Spread them *under*, I should think," added Mr. F.; "no, we must think again. An arch, *when* built, requires *no* support but from the piers. It bears itself up in the middle, and, if properly constructed, the greater the weight the stronger it is. But *until* the last stone in the circle is inserted, it is, of all buildings, the most overwhelmingly ponderous and determined to fall. This therefore must be suitably provided against. A vast structure of timber is formed of exactly the size and form of the intended arch, and capable of sustaining its whole weight until completed. This frame-work is called the *centering* of the arch, and is put together with great art and science. And now, what do you think about the shape of the stones of which the arch is composed?"

"I suppose they must all be made very square and even," said Edward.

"Wrong again," said Mr. Finsbury, smiling. "Square stones would never form an arch."

Mr. Finsbury then exemplified the thing by means of a shelf full of books, not used, however, exactly in the way which their authors

designed. Placing them arch-fashion as well as he could, it was soon evident that they required to be thicker one way than the other. By wedging them slightly open with paper, they were just made to sustain themselves as required. Every stone of an arch is cut to the utmost nicety, so as to be the exact shape wanted in its own proper situation. "Now think what labour, and skill, and knowledge must be exercised, before such works as those we have seen can be completed!"

"But," said Harold, "I remember, when the new bridge was built at Missingham, they used the same bricks that had been taken from an old house, and made a great arch without altering the shape of them."

"A very good hint for explanation," said Mr. F.; "bricks are imbedded in as much mortar as fills up the wedge-like intervals between them; but in bridges scarcely any cement is used. The piers and arches of a bridge being built, it is easy to conceive that a road can be formed over them, and parapets or balusters placed on each side, for safety to the passengers.

I was just going to observe further, that so great is the accuracy and the stability of the masonry in modern bridge arches, that when the centering is withdrawn, and the whole weight is transferred to the innumerable blocks of stone, the whole rarely sinks more than an inch or two. One inch only occurred in the case of Waterloo Bridge."

THE GAS-LIGHTS.

Our young friends had observed, more than once, with surprise, that *night* was not dark in London. Roused as they frequently were by the rattling of carriages in the street, they always perceived that there was light enough in the room to enable them to see the furniture very distinctly. They asked, one morning, if it was usually so.

"It is either nothing uncommon," said Mr. Finsbury, "or else the citizens must be illuminating in honour of your visit! We will take a drive out this evening, and see if we can learn the truth."

"Well, if they are lighting up for us, we must do so for them if they come to West Hill House," said Harold.

"That you may safely engage to do," said Mr. F. "In the evening we will go out, as proposed."

In the mean time, whilst that gentleman and his American friend were out on business, the two lads amused themselves as well as they could with books of prints, and juvenile publications, which were placed in their way by the kindness of their worthy entertainer. But still the time began to hang heavily on their hands, and they found that a lengthened holiday required constant excitement, and continually fresh novelties to make it agreeable. The seasonable occurrence of the dinner-hour, and the subsequent conversation of their very intelligent friends, gave a new impulse to the wings of time. Mr. Finsbury introduced the subject of gas-lights, in order that Harold and Edward might not be quite *in the dark* as to knowledge respecting them, whilst admiring their radiance in the evening.

"Steam," said he, "was not the only im-

portant agent which our ancestors suffered to escape hourly unnoticed from their culinary fires. It was, however, I should have thought, less likely to excite attention, as a commodity of possible utility, than the streaming effulgence of the half melting coal upon their bars; a phenomenon which seemed all the time to reprove them for their stupidity, in neglecting to avail themselves of its flame as an evening luminary."

"Perhaps the time will come," said Mr. Hazelford, "when the sparks of a tinder-box, and the smoke of a chimney, may supersede the use of gas and steam."

"I doubt not," said Mr. F. "that another hundred years will bring fresh powers and agencies to light, and which, if named now by a schemer, would meet with nothing but ridicule. With respect to the flame of coal, no one could be ignorant of its brilliancy and utility as *a light;* but men could not carry stoves and chimnies about in their hands, nor place them by the way-side at every few yards' distance. Unless, therefore, the fuel and the flame could be *sepa-*

rated, (and who was to imagine such a thing possible?) the light of coals must be confined to the fire-places in which they were consumed. But chemistry was much studied twenty or thirty years ago, and to far more purpose than before. It was ascertained that certain substances, whilst burning, gave out large quantities of air, possessing peculiar properties; that certain kinds of air or gas thus obtained, were inflammable in a high degree, and that this gas might be produced in one place, and forced through tubes to great lengths, where it would burn as well as ever. I know not who was the first person who subjected common coal to the process by which the hydrogen gas is produced, for the purposes of illumination at present. The experiment, I know, was performed by some youths of my acquaintance in this way. An old gun-barrel had its touch-hole closed up, and about six or eight inches of coal-dust were introduced. A tube about a yard long, shaped like an S, was then screwed tightly to the mouth of the barrel, and the closed end was thrust into a brisk fire. A tub of water was then brought, and the lower

end of the S tube was placed in it, so that the orifice was just under water. Now, to obtain this fragrant commodity in bottles, it was only needful first to fill the said bottles with water, and when the coal in the barrel began to send forth its gas in bubbles, to invert the bottle, so as that the bubbles rose up into it, thereby displacing the water in the bottle. As fast as the gas rose in, the water flowed out; so that when the glass vessel was destitute of water, it was filled with gas, and a pretty *smelling-bottle* it then was."

"Oh! sir," said Harold, "can we do it at home?"

"It is very likely you may, if grandpapa will find coals, and the cook patience, during your operation; but I would advise you not to commence without due consideration. Now, instead of a gun-barrel and a crooked S tube, and a tub of water, and a flame at the nozzle of a quart bottle, we have in the metropolis fifty immense gas-engines at work; hundreds of miles of pipe are laid along the streets, brought into the houses, circulate our public buildings, and give a midnight radiance exceeding that of many a

winter's day in the city, and which forms a grand line of light in the horizon, seen at more than twenty miles' distance! Thirty-three thousand chaldrons of coals are consumed by them in a year, and seventy thousand public and private lights are supplied!"

"So you have fire and water running side by side very peaceably along your streets below!" said Mr. Hazelford. "I think your underground wonders are as great as any."

"Indeed," said Mr. Finsbury, "what with sewers, drains, water-pipes, and gas-pipes, a street has almost as many veins and arteries as one's arm. The worst of it is, that alterations and repairs break up our pavement too often. We will now take our proposed evening excursion, if agreeable."

All readily acquiesced. They first proceeded as pedestrians through a few streets, and at length entered a shop, wherein the gas-burners were arranged with uncommon elegance and lustre in a sort of fan-light form. The boys were adequately astonished, and seemed rivetted to the spot.

"Oh! I wish grandpapa could see this," exclaimed one of them; "what would he say?"

"He would say, perhaps, that one may live and learn, and that wonders never cease. But when persons have had seventy years of life, they do not lift their brows quite so high at novelties as those do who have not seen fourteen."

"How the flame spins out at those little holes!" said Harold.

"You are making a *rush*-light of it," said Mr. F.: "it is the *gas* that spins out. It is not flame till it joins the external air, and is ignited by fire applied."

The lads examined more closely, and perceived that the flame itself did not indeed quite touch the apertures. When they had sufficiently examined this luminary, the party procured a coach, and viewed the exterior of several public buildings, splendidly illuminated by the same means. Although in these there is little more to describe, there was so much to amaze the eye and the mind of country youths, that Mr. Finsbury found full occupation for them until the

hour had long passed which he had thought of for returning. At length, however, they were withdrawn from those dazzling splendours, and reached their friend's house. After suitable refreshment they retired and slept, with gas-lights and lustres still dancing in their brains.

As gas was *the thing uppermost* next morning, Mr. Finsbury and his friends conversed a little on another surprising use to which the same curious fluid was appropriated—that of *aerostation*, or balloon sailing.

"Well now, you see," said Mr. Finsbury, "we are not content to send the gas underground for our accommodation; we pack it in a silk bag, and dispatch it to the clouds sometimes, and even accompany it there!"

"That I do not at all understand," said Edward. "I mean, I cannot see how it is that a balloon rises."

"We will try and explain it," said Mr. Finsbury. "If you blow a bladder full of air, and

throw it on the water, what will it do—sink or float?"

"Float, certainly," said Harold.

"And the reason is plain," continued Mr. F.; "for it is not very wonderful, is it, that when things are left to themselves to find their own places, the heaviest should get downwards, and the lightest upwards? The water will not suffer itself to be displaced by a thing lighter than itself. It maintains its own situation by its own weight, and supports the bladder on its surface. Now, on the very same principle, a balloon rises in the common air, which is much heavier than the artificial air, or hydrogen gas, contained in the balloon. It therefore rises until it finds itself in those upper regions, where the air is nearly as light as the gas itself. There it floats about, and would never descend, if the bladder, or bag, or balloon, would endure the weather, and remain entire."

"Cannot we make a balloon, sir?" enquired Edward.

"Don't think of such a thing, my dear boys, because the task is utterly impossible for you to

accomplish in the way we have been talking of. I refer to balloons by which persons may ascend. Nor is this inability much to be regretted. One gas-burner has more sensible utility in it than all the sky-flying balloons that have ever been constructed. So much for the powers of gas."

It being a rainy morning recourse was again had to amusement within doors, and Mr. Finsbury thought it a good opportunity to place before his friends specimens and descriptions of the comparatively new art, which forms an important feature amongst the useful novelties of the age;—I mean the methods of

LITHOGRAPHIC DRAWING & PRINTING.

"Here," said Mr. Finsbury, "are some very good specimens of penmanship, mapping, architectural designing, free landscapes, portraits, caricatures, music, and various other examples of art, all done by a process of which the world knew nothing a few years ago."

I believe that, whilst Mr. Finsbury and his

American friend talked over the nature and advantages of Lithographic Printing, our young friends were chiefly occupied with the amusing quality of some of the subjects represented. Amongst these was a print called "A Midnight Revel," which tickled their fancy more than any thing. It gave a view of an old kitchen, deserted, as usual at night, by its human inhabitants; but the bustle nevertheless was more than a little. The tongs, marching from the fireplace, were dancing a minuet with the bellows, which puffed themselves out for the occasion. The form of a musician was cleverly made up of a variety of culinary implements, holding a gridiron for a fiddle; whilst another performer, of similar materials, was thundering away at a frying-pan for a tambourine. A coffee-pot was capering away on the dresser, mounted on sugar-tongs as legs; whilst another vessel, whose limbs were composed of knives, forks, and skewers, footed it away on the tight rope above. The whole was innocently comical, and pleased the lads so much, that Mr. Finsbury promised to procure an impression for them.

"Now," said he, "we may as well know how that clever print—for such it is—can be produced, and for the small charge of one shilling."

"Perhaps," said Mr. Hazelford, "a little previous information respecting other modes of printing, might be acceptable and useful."

"Well then, I will endeavour to supply a few particulars," said Mr. F; "and I will be brief, although my former pursuits would enable me to be particular. Prints had, until lithography was invented, been of two sorts only—being supplied either by copper-plates or woodcuts. A copper-plate engraving is wrought a proper depth into the substance of the metal. Thick, oily ink is then rubbed carefully in; that *on the surface* is wiped as carefully off, and damped paper being laid on it, is so rolled through a very tight press, that the paper is forced partly into the strokes containing the ink, which then adheres to the paper, so that line for line, and dot for dot, may be discerned; and there is your print, or impression. This, after all, is the only mode proper for a highly-finished engraving.

"*Wood-engraving* is exactly the reversed process. Deep places are dug by the graver in the surface of the block, which hollows are to be out of the way of the ink, which is not worked in, but dabbed on, and blackens all the remaining surface. The paper is then pressed on by another sort of a machine, and licks off the ink, and exhibits it just in those forms and places which were proper to accomplish the artist's design.

"But engraving on wood as well as copper is a slow and difficult art, and requires much care and skill to give a pleasing result. Indeed, a life is often too short to require real eminence herein. The print, thus produced, must of course be expensive, as the plate is not to be accomplished without time and labour; yet there are many occasions which require a cheap and speedy operation.

"It occurred, I believe, first to a German, about thirty years ago, that the result of a wood-engraving might be obtained without any engraving at all, by drawing merely on a different substance with a suitable material. The object being to make the ink adhere in some

places, and not in others, this ingenious artist, Alois Senefelder by name, procured a kind of absorbent stone, on which, with a prepared paint, or ink, he drew, or wrote what he pleased. According to his directions, water is then applied to the stone, which soaks in, and moistens every where but the places where the ink has been. Oily ink is then liberally bestowed on the whole surface, which ink is unable to adhere to the wet parts. It soils them not at all; but it takes readily to those where the former drawing ink was applied, and which have not become wet. Paper is then placed on the stone in this condition, and pressure being applied, you have the lithographic impression as often as the *printing* process is repeated."

"There can be no doubt," said Mr. Hazelford, "that lithography is a great invention. If men could print always as fast as they can write or draw, knowledge and art would cause civilisation to proceed ten times as fast as it now does. Printing has polished one half of our rough globe, and *speedy* printing may brighten the other half before long."

"As for speedy printing," observed Mr. Finsbury, "the introduction of machinery to letter-press seems to accomplish the matter somewhat quicker even than thought. I found, in 'The Arcana of Science and Art,' published last year, a statement which might exceed belief, if it were not known that the thing is exceeded, in point of fact, by the Times newspaper. Here is the paragraph:—'The Atlas newspaper, published on the 14th of March, 1829, had twenty thousand copies struck off in the space of a few hours, each copy containing forty feet of printed surface; therefore eight hundred thousand square feet were produced, capable of covering twenty acres! This number of copies consisted of three hundred and twenty thousand leaves, measuring sixteen inches in length; or of six hundred and forty thousand pages; or of one million, nine hundred and twenty thousand columns; or of two hundred and forty-one million, nine hundred and twenty thousand lines; or two thousand four hundred and nineteen million, two hundred thousand words. Supposing, there-

fore, that an ordinary octavo volume of five hundred pages, contains a hundred and seventy thousand words, the press of the Atlas printed, in those few hours, matter sufficient for fourteeen thousand, two hundred and thirty thousand octavo volumes! If the sixteen leaves of each copy be cut out, and placed end to end, they would reach from London to Salisbury; and if each leaf be divided into its respective three columns, and similarly arranged, the printed slip then formed would be of sufficient length to go round Middlesex, and the seven surrounding counties. The whole of the machinery by which these wonderful effects are performed, consists of two large, and two lesser cylinders, put in motion by a steam-engine of four-horse power, managed by THREE BOYS; whose interference on the occasion was strictly limited to the presenting the end of the enormous blank sheet to the first cylinder, and the receiving it in a few seconds, printed on both sides, as it was discharged from the last cylinder!' "

THE DIORAMA AND COLOSSEUM.

A REMARKABLY fine day afforded, at length, a favourable opportunity for visiting these truly surprising and interesting spectacles. Our party set off in expectation of great things, and I do not find that their hopes were at all disappointed.

The question regarding a conveyance was adjusted as soon as Mr. Finsbury issued from his door. A finger held up on his part was answered by a horizontal elevation of a coachman's whip, who immediately *pulled* across the way, as the phrase is, with that capacious convenience called an omnibus.

None of our party but Mr. Finsbury had entered such a machine before, and they were not a little amused with the novelty. Sixteen passengers on opposite seats formed something like a cabinet council, in appearance, but no business transpired. Locomotion was the only object common to the assembly, and this was

attained without effort on their part. Going down Pentonville-hill, a hollow place in the road caused a sudden jerk, which displaced poor Harold, and sent him on his knees before an individual opposite, which, as it happened to be Mr. Finsbury, was attended with no other consequences than a general smile. He remarked that he could stand quite steadily in the sort of *waggon* used in the country.

"So you call this *a waggon*, do you?" said Mr. Finsbury. "You must not let *Mr. Shillibeer* hear you, for he considers it a very smart and commodious coach!"

"I think it seems like a piece of the Thames Tunnel," said Edward.

Presently afterwards the vehicle stopped, and the door-keeper at the end announced, "The Diorama Gate." Alighting immediately, a few steps to the right brought our friends to the building.

That master-key, money, having been suitably applied, every portal gave way, and they ascended to a place which might almost be called a dark-lantern. It however contained seats,

on which the party placed themselves, and little more notice was taken of this curious vestibule; for the scene which presented itself on the open side, speedily fixed every eye. The scene was Mount St. Gothard, an assemblage of spiry, precipitous, riven rocks in Switzerland. The illusion was indeed complete. A shadowy chasm, amidst the vast Alps, showed a winding road, at an awful distance from the summit and the base, which had a low parapet only as security from the gulf on the open side. A bridge of a single arch was thrown across the fissure, and terminated the view of the carriage-road. Distant mountains, summits covered with perpetual snow, and the blue tops of others, showed themselves above; whilst a roaring torrent, the rushing sound of which was exceedingly well managed, pursued its course beneath. The lads looked even pale at the sight, and had not a word to say but in a subdued whisper.

"I thought it was to be only a picture," said Edward; "but they must be real rocks and mountains, made on purpose!"

"*It is only a picture*," replied Mr. Fins-

bury. "To convince yourself of this, you have only to change your position in the room, and you will see the objects are seen exactly in the same way, go where you will. For instance, there is a projection *represented* of a piece of rock in front. If a real projection, by moving across the apartment, you would see a little this way or that of the object behind it; but you find it is in vain that you rise from your seat, or stoop, or go from side to side; nothing different can be seen. It must, therefore, be a plain surface."

At this moment a bell rang, the doors of the gallery were adjusted, and the occurrence of the swing-bridge seemed to be experienced again. No one, however, perceived the motion until another and brighter view burst upon the eye from the left. This gradually expanded, whilst Mount St. Gothard narrowed at the same rate, and at length disappeared. The youths now found their tongues.

"Oh, this *must* be a real town! Now, sir, there is the very shadow of one of the houses on the street. Dear me, what strange buildings!

lumps of stone laid on the roof, and the tiles of that other house look like fish's scales. Now say, sir—is this a picture?"

"It certainly is, my dear boy, and an admirable one too."

Mr. Hazelford partook of the natural tendency to incredulity, and actually shifted his place several times to convince himself of the truth.

"IT IS ASTONISHING!" said he, with great emphasis. "It is hard to say that that scene is nothing but paper and colours; yet the *proof* is so easy and incontestible, that the mind is fully compelled to call the eye a deceiver—reluctantly, yet positively, we are obliged to say, that posts, boards, tiles, stones, utensils, a road-way—every pebble of which has its own unimportant shadow—the bridge, the stream, the mountain—are all mocking ghosts and untruths! It would seem as if, by walking to the right, I certainly should see more of that building beyond; but no—somehow they all stick together at the corners."

"But surely, now," said Harold; "just that

birch-broom, leaning against the house, is real. I suppose it was less trouble to put one there than to paint one."

"A birch-broom tacked on to a picture, Harold! No," said Mr. Finsbury; "that would, indeed, only have appeared like a thing hanging in the air—it would have formed no part of the scene. All is the work of an artist, who has taken an unusual method to enlighten his performance."

Harold now consulted the paper given him at the door, and found that the scene in question was the village of Unterseen in Switzerland; showing its principal street and houses, with mountains just beyond.

The *foreign* structure of the houses was a peculiar feature to English and youthful eyes. The roofs projected far beyond the walls, and sheltered heavy wooden galleries, by which the apartments above were entered. Some of the houses were covered with fir-boards, fixed on by cross planks, and these kept down by large stones, at irregular distances.

"Why did they not show some of the peo-

ple?" asked Harold. "There is nobody at all to be seen."

"The artist was wise there," answered Mr. Hazelford, "for these must have been *motionless*, which would have too soon undeceived the eye. For gate-posts and buildings to stand still, is not so remarkable as for persons to remain so for hours together."

The bell now rang again, and by an unfelt agency, the building in which the spectators sat again slowly revolved. Unterseen was shut out, and Mount St. Gothard reappeared.

"I generally wait," said Mr. Finsbury, "till the scene has changed a time or two, for the contrast itself is striking—particularly here, from the sunshiny, cheerful homeliness of the village-street, to the blue grandeur of the towering Alps. We are allowed a quarter of an hour at a time for each view."

After an hour spent in the alternate contemplation of those amazing exhibitions, our party left the Diorama, and directed their steps to the Colosseum, not far distant.

"A use may be derived from the sight of the

Diorama," observed Mr. Finsbury, "which perhaps was never meditated by its contrivers. It affords an important lesson to all those who would persuade themselves and others, that what they see cannot be disproved by what other men know and declare; in fact, that sensible objects must be what the senses take them for, and that nothing can be true that contradicts them. The period will come, when death will so change our position as spectators, that the things of time will be *proved deceivers*, and not those substantial realities which the world held them to be. Religion now does the friendly office of *undeceiving* us beforehand, if we choose to give her a hearing."

The gate-way of the Colosseum was now at hand; but admission was not to be gained here on such easy terms as at the Diorama, *five shillings a-piece* being the sum demanded.

"We can scarcely expect to find this exhibition five times as good as the last," said Mr. Finsbury. "Certainly, in point of *interest*, a view from the top of St. Paul's is not equal to Alpine scenery."

"The expense of this building must have been enormous," said Mr. H.

"True," replied his friend; "and that of the revolving saloon we have left must have been great also. I think the good folks here rate their commodity too high."

They were first introduced to the model-room. But our friends were not detained there long. The figures, as works of art, were generally of an inferior kind, and were in other respects unfit for exhibition. A very civil gentleman now accosted our friends, and wished to know if they would ascend to the galleries. None but Mr. Finsbury thought of any other method of rising than that which steps and feet afforded, until they were ushered into a sort of lantern, where two or three others were sitting, when they were told, that by keeping their seats they would rise sixty feet, and save themselves eighty steps.

"Oh! now we are going somewhere," said Harold. "Edward! Edward! this is like being in the boat!"

Less than three minutes were sufficient to raise the almost unconscious aeronauts to the

level of the first gallery, on which they entered safe and sound.

It is but justice to the clever and indefatigable artists employed on the vast work before them, to say that the effect is most astounding and impressive. The mind seems embarrassed at once by the representation of the eye, and by its own knowledge of the delusion. "Well now, my boys, what do you think of this?" asked Mr. Finsbury.

"I don't know where I am!" said Harold.

"I am almost giddy!" said Edward.

"There is something unaccountably perplexing to the sense and reason in this sight," said Mr. Hazelford. "If any one were suddenly placed here without his previous knowledge, he would set this down as a dream; and there is just that mixture of probability and queerness which constitutes a vision of the night. It is high praise to the artist to say, that it requires a constant effort to retain the belief that it is a picture. See! here are telescopes fixed at every few yards."

"This part of the Colosseum is an immense

dome, thirty feet more in diameter than the cupola of St. Paul's," said Mr. Finsbury. "I understand that the picture covers forty thousand square feet of canvass; that is, nearly an acre. It takes in an horizon of a hundred and thirty miles circumference."

"In order to judge of this performance," observed Mr. Hazelford, "we ought to consider the difficulties of the undertaking. I think there is not above one man in a hundred who possesses *patience* sufficient to make the sketches. Then, to give the effect of an expanded surface on a dome-shaped building, which contracts where the view should widen, was a task of great difficulty, and must have required a high degree of genius and science."

"We are to suppose ourselves on the summit of St. Paul's early in the morning," said Mr. Finsbury, "before the majority of the people are stirring. The thin columns of smoke from the innumerable chimnies are beginning to mingle into one, and the grey cloud is slowly moving before a slight breeze."

"Perhaps, Mr. Finsbury, for the information

of us strangers, you will point out a few of the principal objects."

"Certainly," said his friend. "Looking towards the west, down here, we see the two turrets of the building on which we are supposed to be placed. Thence we pursue, by the eye, the larger streets and river, until London is lost in the country. There, by the glass, we may plainly discern Harrow, Richmond, and the royal towers of Windsor, together with I know not how many villas and villages which surround this modern Babylon. Now let us walk round to the other side. This is the eastern view. Following the windings of the river, we discover the London, and India, and St. Katharine's Docks; Greenwich and its hospital; Woolwich, and other water-side places, almost to the Nore."

Mr. Finsbury then pointed out the chief buildings of the metropolis itself; and remarked, that not only were these faithfully delineated, but even private houses, with whose form he was acquainted, were as accurately represented. Of course, however, this could only be the case with such as were situated near the point of view.

"And now," said Mr. F. "having traversed this gallery several times, suppose we ascend to that above."

Accordingly, the party went up a flight of wooden stairs, and attained a much higher elevation, when they stepped upon a platform, intended to give another view and an additional interest to the spectacle. But Mr. Hazelford stepped back, and said: "There is something stupifyingly odd in this view. What is it that gives suddenly so strange an effect to the scene?"

"I think I can explain it presently," said Mr. Finsbury. "Young gentlemen, what do you think?"

"I think the world looks very small now," said Harold.

"And we look *down* upon the sky," said Edward."

"That is the very thing," said Mr. Finsbury. "I am astonished that the scientific and artistical men who contrived and produced this magnificent spectacle, should have forgotten that to introduce the spectator to a point where he looks

down upon the horizon, is to present him with the greatest possible absurdity in perspective. As we rise and view the real earth, the horizon always rises with us, and would do so, were we a thousand miles high. This view crazes the mind by its giddy, falsifying effect. London here looks like a portion of a little planet, the circumference of which is somehow hidden by the sky! Let us ascend still higher, and view a scene where the horizon is managed on a natural plan."

Again mounting by a curving wooden staircase, a scene incomparably bright and beautiful presented itself—it was the *real* face of nature, enriched with the proud works of man, that they now beheld from the *external* gallery of the Colosseum.

"We now see, by lively and immediate contrast," observed Mr. Hazelford, "the difference between the copy and the pattern. The *shininess* of an open sky, and real objects enlightened by the sun, makes the artificial scene appear like dim twilight, at best."

"Another thing," said Mr. Finsbury, "is *motion*. Trees are bending and fluttering, clouds

are passing, men and animals are plying busy feet below in all directions, and the refreshing effect of the gusty breeze rushing by us—all these things are enough to make nature really inimitable by man."

They proceeded down again to the gallery, where the rising lantern had landed them, and being seated, found themselves in a few moments on the ground floor. Our friends then passed through a very pretty conservatory, in which were many rare exotics from equatorial climes.

"The mechanism and structure of vegetation seem to be altogether different, when we examine tropical plants," said Mr. Finsbury. "The growth appears enormous, and the leaves, flowers, and fruit, are as unlike those of our own fields and gardens, as if they came from the moon."

Several long passages now conducted our party to a scene essentially different from what they had beheld before. A Swiss cottage, and alpine scenery, not *represented*, but *built*, formed the wondrous spectacle now.

"You do not ask whether *this* is a picture," said Mr. Finsbury to the lads.

"Oh! dear no," was the reply: "these are real mountains and cataracts. How wild and grand it is!"

"They are *real forms*," said Mr. Finsbury, "and arranged with great taste, skill, labour, and expense. Here, you see, is real motion: the water actually rattles down those precipices as fast as it can. Here too are water-fowl of various kinds, pluming and washing themselves, and not at all aware that they are not in Switzerland. Here is something to remind us that *we* are not there; being genuine London pastry provided for our accommodation. Let us rest awhile here and partake."

The incongruity of jellies, tarts, and plum-cake, with the mountain crags before them, did not appear so forcibly to the lads as to prevent them from doing full justice to the good things.

"One thing I have thought of though, which *is* appropriate," said Mr. Finsbury: "a few *ices* will perhaps help our conceptions of the atmosphere on those blue peaks above us. Strawberry and lemon ices were now handed round by the nymph of the cottage. Our young friends,

if the truth must be spoken, had never partaken of any before, and they could not help exhibiting a few distortions of countenance as they swallowed those fiercely rigorous sweets.

By the time our friends reached the city, Mr. Finsbury's dinner-hour had arrived, which was enlivened by interesting conversation on the subjects to which their attention had so forcibly been directed that morning.

THE REGENT'S PARK AND ZOOLOGICAL GARDENS.

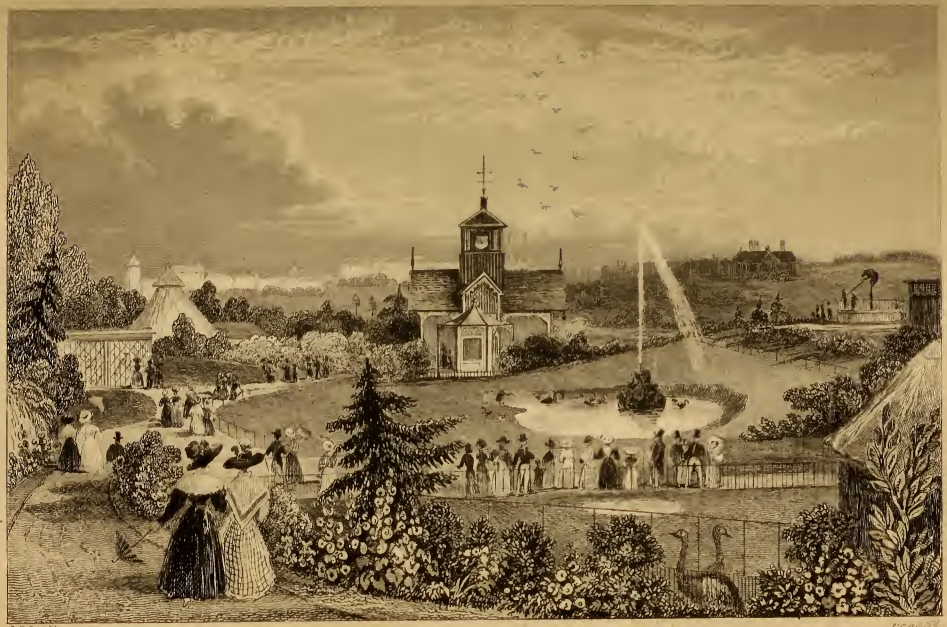
Mr. Finsbury and his visitors were so much occupied with the Diorama and Colosseum, that they had not time on that morning to take particular notice of the beautiful spot in which they are situated. They took the opportunity, therefore, on the next fine day, to drive round the Regent's Park, and visited the Zoological Gardens at the north-east corner of it.

"Here we have something like a suitable metropolitan pleasure-ground," said Mr. Finsbury. "It is on a magnificent scale, and

seems likely to grow in splendour and beauty every year. But a few years ago, there was nothing here but a dreary expanse of comparatively unproductive ground. Here are nearly four hundred acres, which have been enclosed and laid out with all the embellishments of a baronial park; to which are added the magnificence and elegance in building which are suitable to the capital. The terraces, villas, and other erections here, are too numerous for us to notice particularly."

"There is indeed much of splendour and beauty about this spot," said Mr. H.; "but there is too much an air of the town about it for those who have a genuine taste for the country, I should think."

"That is true indeed," replied Mr. F.; "and for my own part, I would sooner have a cottage on a heath, if I had the liberty of a choice. But considering how many are tied to London by circumstances, it is a great thing to have a space like this so near, wherein green leaves may at least be seen, and a somewhat purer air inhaled."



Melville. page 83.

THE ZOOLOGICAL GARDENS.

"I am sure I wish grandpapa would come and live here," said Edward.

"I am sure *I do not*," said Harold. "This is a very fine, pretty place, but I should not like to leave our country for it."

Various conversation ensued, until the party reached the Zoological Gardens, the inhabitants of which soon fixed the attention of all. The minds of our young friends now underwent another important enlargement, corresponding to a vast store of new ideas which presently obtained admission. All the kangaroos, ring-tailed monkeys, and nyl-ghaus, of their books, had failed to make any definite impression; but now, one glance at the living realities, aided by the testimony of the ear to the actual notes of their varied musical performances, booked the whole for the memory. The strange cries of foreign animals tend very much to enhance the surprise of new beholders. But the animals here were not tormentcd into their savage tones of expostulation, like the unhappy beasts within the booths of a country fair. They were rendered as comfortable, in every respect, as such outlandish

visitors could be, and were accommodated with their peculiar food, lodging, and pastime, as nearly as possible.

" What are the chief objects of this vast and interesting establishment?" asked Mr. Hazelford; " not, surely, the profit of a few proprietors, or the indulgence of public curiosity."

" The objects are purely scientific," said Mr. Finsbury. " A society was formed, I believe, about five or six years ago, for the purpose of extending the means of zoological knowledge, and they are therefore called the ' Zoological Society.' They made an arrangement with the Commissioners of Woods and Forests, to whom the government of the Park belongs, for a portion here of considerable extent, for which, I think, they pay four hundred a year. They have also a farm at Kingston, appropriated expressly to the nursery of rare species of birds, quadrupeds, and fishes. They have a committee of science and correspondence, for discussing questions and experiments in animal philosophy. They have established communication with the most noted establishments of the kind in Europe,

and their constant endeavour is to enlarge our store of facts in the history of animated nature. Their great plan is to do this by obtaining living specimens, if possible. The king's Windsor collection was not long since placed here. Besides this, meetings are held, and lectures given by their most scientific men, and tracts and reports are continually published under their superintendence."

"Well," said Mr. Hazelford, "I must say that English folks have incomparably more of the spirit of enterprise in science and the liberal arts than we. If we could obtain a collection of all the uncouth wonders in the animal creation, I am certain we could not be induced to keep them at this expense."

"What will you say to the next exhibition?" said Mr. Finsbury; "I mean, our

BRITISH MUSEUM.

"This building," said Mr. H. as he approached it, "surely has a foreign aspect: it is unlike your English houses."

"You are right," said Mr. F. "This was Montagu House; built by the first duke of that name, who employed a French architect, one Peter Puget. Few private mansions, however, would accommodate national convenience in a museum so well as this: it was at once spacious and commodious, but has been made far more so by recent erections and improvements. It was established by parliament about eighty years ago, Sir Hans Sloane having left his vast collection to the nation on payment to his executors of twenty thousand pounds, it having cost him fifty thousand pounds. Several other collections have been added; this house was purchased, and the establishment then completed for about eighty-five thousand pounds. It is, however, increased, and is still increasing greatly; and, as new donations and bequests are continually coming in, we cannot say when this vast storehouse will arrive at its greatest extent."

"Men," said Mr. H. "are so busy now in searching out rarities, and have so much inclination and ability for the pursuit, that museums can never be said to be complete until the earth

has been sifted to its centre: and, in fact, the more we examine the better."

"The ocean, too, must be filtered through a canvass bag," added Mr. Finsbury, "or we shall not be satisfied. However, it is not our wish to ridicule investigations which have discovered the foundations of knowledge. Harold and Edward, remember now, that an observant eye and a retentive mind will enable you this morning to enlarge *the museum in your head*, in a way that will enrich you vastly at no expense whatever. These things are placed here, not merely that persons may say *they have seen them*, but that they may copy them into their own books of knowledge, and have them there *ready for use*. Here we have, in the first place, specimens of the handy-work of nature, delved from the earth, stolen from the secret chambers of the deep. Here are wonders from the den, the forest, and the mountain crag. And then the work of the long-perished finger of man, of which here are countless examples, will lead back our minds, by an interesting path, to the acts and efforts of past ages, when the human mind wrought

by the dawn, not the daylight, of science. Here also, in a vast assemblage of MSS. and books, we see the most precious and costly fruits of human intellect, the acquired possessions of a thousand powerful and eager minds, whose hard-earned gains are now thrown into one stock for our use, if we care to avail ourselves of their labours."

Harold remarked, that they did not enter on the ground-floor, but went up stairs directly.

"The rooms below," said Mr. Finsbury, "contain the library, to which persons are not admitted until they have made proper application for that purpose to the trustees. I do not suppose that *we* shall need an introduction there this morning: indeed, we shall only have time to glance at a few rooms open to the public generally."

Sticks and umbrellas were now demanded of our friends. Harold gave his up with some reluctance and alarm, it having been bestowed on him with many injunctions regarding its safety by his grandfather, before he left home.

"I suppose," said he, "they take umbrellas

instead of money here. I think grandpapa gave fifteen shillings for mine."

"Make yourself easy, my boy," said Mr. Finsbury: "your umbrella is not such a curiosity as to be wanted at the British Museum for exhibition. Persons are not allowed to take things into the rooms with which they might, in pointing at the objects, touch and injure them. Every one has his own at leaving."

On ascending to, and entering the first room, our young friends, as is usual, found themselves rather more bewildered than gratified for some time. The countless variety and multiplicity of the objects, few indeed of which were understood by them, produced rather a disappointing effect. Their two friends observed this, and soon directed their attention in a way to excite their interest.

"Two things are needful," said Mr. Hazelford, "to render a survey of these objects pleasingly useful—*time and knowledge.*"

"We must therefore make the best use of what we have this morning," said Mr. Finsbury; "and if we happen to be aware of a few things to which these young gentlemen have not yet

attended, why, we must assist them a little; and I dare say, if *they*, in turn, should be beforehand with us in any piece of information, they will give us the benefit of it!"

The boys smiled, and Mr. Finsbury and his friend good-naturedly took them by the hand, and pointed out several objects which they had previously marked on the list.

"Here," said Mr. H. "are some of my own countrymen's performances, I declare! North American implements of war, and specimens of clothing and ornaments. Do you see, young gentlemen, what clever, civilized folks, we are over the water?"

"I am sure those things belonged to savages," said Edward, "because I have seen things exactly like them in prints of the manners and customs of nations."

"You are right," said Mr. H.: "those curious weapons, garments, and idols, come from tribes of Indians, who reside far west of the United States. What a strange mixture of rudeness and neatness, of taste and barbarity, these things exhibit!"

"What ugly image is this?" enquired Harold.

"It is *an Indian god*," said Mr. Hazelford. "The human mind, aware of the existence of a Deity, and that there is something to be dreaded from him, generally conceives of a malignant being, not of a good one, as an object of fear and worship."

"The fact seems to be," observed Mr. Finsbury, "that almost all pagan worship is an homage paid to demons, whom ignorant men regard as the real agents of human destinies. We are taught better things."

The next objects of attention were specimens of lava, and fossil-shells, but these were too numerous to be noticed distinctly. The second room, containing a vast variety of many-legged insect tribes, might have detained a naturalist a month. Passing on through the saloon, where mineral specimens were beautifully arranged, Mr. Finsbury made some remarks on the substances called meteorolites, or meteoric stones, of which several specimens were before them. "It seems to me," said he, "that the mysterious origin of these substances forms one

of the most interesting subjects of speculation in nature. Until about thirty years ago, philosophy smiled only at the vulgar notion that solid masses descended from the heavens in the form of thunder-stones, or bolts; but we have learned, at length, to look facts in the face, without being so absurd as to deny their existence at the same time."

"There are, then, indisputable testimonies to their falling from the upper regions?" said Mr. Hazelford.

"Unquestionably. Mr. Howard, in the year 1802, submitted to the Royal Society a paper, which contained an accurate examination of that testimony, which now is no longer doubted. The image of Diana, and the Palladium of Minerva, evidently were founded on these facts, and it is thought that the ancient worship of stones originated in the same way. The phrase in the Psalms, 'Hailstones and *coals of fire*,' we can scarcely explain, but as having a reference to meteoric substances. But to be more particular as to facts. In November, 1492, a dreadful clap of thunder was heard at Ennisheim, in

Alsace, when a huge stone fell on a wheat-field. It sunk three feet in the ground, and weighed two hundred and sixty pounds. Two others fell at Verona, in Italy, in 1672, one of which weighed three hundred, and the other two hundred pounds! Mr. Townley, the botanist, possessed a meteoric stone, which fell in Yorkshire on the 13th of December, 1795, and weighed fifty-six pounds. Whilst it was passing through the air, several persons perceived a body moving along the clouds. It travelled over some miles of country, and at length an explosion took place, which alarmed the people. The names of the persons witnessing its fall are given. I believe the last circumstance of the kind which has been published, occurred in Persia, in the year 1814. A *shower* of stones then took place, many of which weighed from twenty to thirty pounds!"

"Where can they come from?" said Harold.

"Naturalists are still at a loss for an answer to that question," replied Mr. Finsbury. "In the exigence of wonder caused by these facts,

some have supposed that volcanoes in the moon have discharged them so far, as to come within the range of the earth's attraction; others have thought that they may proceed from terrestrial mountains. I confess that these conjectures are not to me satisfactory. But we must pass on. In this next room we have a grand collection of shells—contrivances of Nature, by which she provides a numerous class of animals with tenements and munitions of strength. See! young gentlemen, this is the paper-nautilus, as it is called, which it is supposed first taught man to navigate the waters. It is a species of sea-snail, common in the Mediterranean. It has eight limbs, furnished with membranes: six of these it erects when on the surface of the water, and forms thereby a sail; the other two are kept under, and used as oars."

Edward was so much interested with this and some other curiosities, that he enquired if any of them were to be bought.

"Not for a thousand pounds," said Mr. Finsbury. "The object of the institution is to gratify and inform the public by the exhibition.

The collection, therefore, is inviolable, as it should be."

Another apartment presented the visitors with an interesting collection of the natural antiquities called *organic remains*.

"Here," said Mr. Finsbury, "we are introduced to the comparatively modern science of geology; a study which brings under examination the substances of which the earth is composed, as far as we can penetrate into its recesses, and which reveals those wonderful transformations by which bodies which had once life and growth, have become solid earth or stone. The most curious fact, perhaps, belonging to this science is, that tribes of animals have been discovered in a *petrified* state, of which no living examples have been known to human records. Teeth and bones have been found, which must have belonged to animals vastly superior to the elephant in size."

The party then surveyed the articles as well as they could in the time; noticing, especially, the imbedded human skeleton from Guadaloupe; the immense English lizard from Lyme Regis;

stag's horns from Iceland; and a large collection of crabs, sea-eggs, sea-lilies, rushes, fruit from Sheppy, and other *fossils*.

The preserved birds obtained, perhaps, rather more of the attention of our young friends. This was natural; for less knowledge was required to perceive their peculiarities and beauties. The same was in measure true with regard to their observation of the other tribes of animals, stuffed and preserved in the same manner.

"And now," said Mr. Finsbury, "we must view the ancient products of human heads and hands. The finest works of the first of nations are before us. The Greeks and Romans have not left us to gather their greatness only from their writings. These were their *doings*, two or three thousand years ago; and we may examine, with our own eyes, the merits of those performances, over which the eyes and the hands of their inimitable artists wandered with such successful diligence and taste.

But for the reasons we have just referred to, and the multiplicity of objects, Harold and Edward did not make many remarks till they entered

the room containing the Egyptian antiquities, when the head of Memnon occasioned a burst of surprise.

"Oh! dear sir," said Harold, "is that the image which fell down from Jupiter, that you spoke of this morning?"

"What a surprisingly great person this must have been, if *a fossil!*" said Edward. "Pray, sir, what is it?"

"It is part of a colossal statue of Memnon," said Mr. F. "cut out, with surprising skill, from a block or rock of stone, now almost impenetrably hard. This was an object of worship for ages in Egypt; but was brought here by the efforts of the celebrated Belzoni and Mr. Salt, not long ago."

On the other side, Mr. H. pointed out the vast sarcophagus, or coffin, covered with hieroglyphics, and supposed to have contained the body of Alexander the Great. After examining these and the animal sculptures, objects of ancient worship in Egypt, Mr. Finsbury and his friends visited, in their return, the building containing the marbles brought from Greece by Lord

Elgin; and, at a late hour, they reached his own house, where dinner had been some time waiting.

WEST END, NATIONAL REPOSITORY, SKELETON OF THE WHALE, BAZAARS, COVENT-GARDEN, &c.

Our enquiring travellers seldom passed a day without a drive or a walk, which added something to their ideas of London, as it is at present.

The west end of the town, and its surprising objects of attention, engaged them during one long morning.

"I wish we had your grandfather with us this morning," said Mr. Finsbury; "for he knows well the state of these parts forty years ago. I have no doubt that he might now lose himself within half a mile of Charing Cross."

"What have you Londoners been doing lately, to change the features of your metropolis so much?" asked Mr. Hazelford.

"Every thing that money and enterprise, and

a zeal for improvement, and professional ability, could accomplish," said Mr. F. "Almost a new city has arisen, within a few years, about the spot I have mentioned. Old palaces have sunk out of existence, new ones have arisen; mansions for the nobility, of the most splendid kind, form now spacious streets in the room of dilapidated houses. Existing buildings of merit have been laid open to public view by their removal; new roads have been planned and executed; and, in fact, a new aspect has been given: but of this, only those who have known the metropolis for years can well judge. We have long felt the taunts of foreigners respecting the comparative meanness of the buildings of our capital, and an effort has been made, to a considerable extent, towards an improvement in these respects."

"Undoubtedly," said Mr. H. as they passed down Regent Street and the Haymarket, "if west London was ever like the east, or the city, the change is vast. Here is magnificence, and the stateliness of national opulence."

"There was a strange mixture of erections

here," said Mr. F. "and of inconvenience and importance in their situation and structure; but I think now we have little need to be ashamed of this entrance to London."

After a pretty long walk amongst the chief streets and buildings, Mr. Hazelford owned that his expectations were exceeded. As for Harold and Edward, it was a continued wonder to them: so many novelties, and grand ones too, met their eyes every instant, that their old ideal impressions of London seemed to be revived.

"This is quite as grand as I thought London really was before we came," said Harold. "What a little place grandfather's house and garden will appear to us when we return!"

"Oh dear! I almost forget it," said Edward.

"It is to you the most worth remembering," said Mr. Finsbury; "and do not forget that the comfortable residence of an independent gentleman, like that in which you have been brought up, will bear comparison well, in the more important respects, with the most splendid mansion here; and many who here reside, would be

thankful for such a retreat, secured by your aged relative's property."

The National Repository at Charing Cross was now approached, and Mr. Finsbury explained its nature and design in a few words previously.

"This establishment," said he, "is intended for the exhibition of specimens of new and improved productions of the artisans of the United Kingdom. It is under a board of management, consisting of the most eminent men in practical science we have. New inventions, or old ones improved, superior excellence of manufacture, or any efforts by which useful purposes are promoted, find encouragement here. The specimens, or models, are examined by any who choose to take that trouble, so that merit need not lie hidden now. Government has frequently adopted suggestions or inventions exhibited here, and thereby has greatly rewarded the artist for his ingenuity and skill. Here we are! One shilling only is the charge for each: I trust we shall not deem that small sum misspent."

The gallery of the institution, which is two

hundred and forty-eight feet long, presented a most interesting spectacle, from its vast assemblage of curious articles. Neither they nor we could possibly notice more than a very few particularly. The lads were somewhat struck and amused, in the first place, with a kind of dial, which, instead of the hours of the day, had the words dinner, tea, supper, boots, chambermaid, carriage, horse, hot water, eggs, wine, &c. inscribed upon it.

"This," said Mr. Finsbury, "I see, is intended for a domestic telegraph: what shall we have next? My lady and gentleman are to be saved the trouble even of naming their wants to their servants by this contrivance, a dial in their room answering to one in the kitchen by an index communicating with both."

"We have not refined our American methods so far at present," said Mr. H. "Here seems to be an invention of more importance—an apparatus for preventing accidents from the running away of horses; an extra rein is connected with a small box in the carriage, containing a roller actuated by the wheels; so that if the

coachman should lose his power, or his seat, they will be gradually wound up by an irresistible force."

"Not a bad invention," said Mr. Finsbury, "if properly applied. What have we here, a tea-canister, or a coffee-biggen? This machine is at once cook and kitchen, if we understand the inventor; an apparatus which is to boil water, make tea and coffee, boil eggs, cook a beef-steak or a slice of ham, and all in ten minutes! Then for dinner, it will prepare soup, steam vegetables, fry fish, chops, and cutlets, all at the same time, and with one farthing's worth of fuel! It is contrived so as to be used on the breakfast or dining-table, to be taken in a carriage or a boat, or even carried by pedestrians."

"If it performs half that, it is a very ingenious and useful article," said Mr. Finsbury. "There is another process needful, and previous, which, if successful, it will accomplish no doubt for its inventor—it will buy him victuals!"

Passing on, our party noticed the beautiful specimens of silk and other weaving; the elegant and elaborate productions in glass; examples of very rich stained glass; and other productions of

high skill and taste. The models in architecture and machinery were peculiarly interesting, especially to the lads, as they could take in, at a near view, the various parts.

"Oh! what a beautiful little church!" said Edward: "how cleverly it is put together!"

"That is a design model," said Mr. Finsbury, "arranged in the form of the holy sepulchre at Jerusalem, and also like four ancient round churches in England."

"Look! look here, Edward," said Harold: "here is St. Paul's complete!"

"Now you see a little more of the real form of that magnificent structure than you could be aware of from a glance at the building. But recollect, the artist here had only to copy and put his work together: he had no anxiety regarding the design or stability of his building. It is this which calls forth the great science of the architect. The model, with a glass roof, of the Catholic Chapel in Moorfields, and that of the Thames Tunnel, detained our friends next. After this, the machine models were examined. Mr. Finsbury drew the attention of his young friends particularly to several beautiful little steam-

engine models, by the help of which they clearly understood the principles before explained to them. As for the tools and countless implements of art, they could only be glanced at generally, and admired for the beauty of workmanship which they exhibited. Philosophical instruments were not passed without occasional remarks. A beautiful air-pump seemed to require a few words more than some others.

"See!" said Mr. Finsbury, "what capital mechanism is requisite to displace a small portion of that invisible fluid around us. There is nothing that proves the weight and mechanical properties of the atmosphere so well as this. The glass bell is placed so as that the pump withdraws the air within it, forming what is called a vacuum, though, in reality, a little air will always remain. When the air from beneath is removed, the pressure of that without fastens the bell down so that the utmost force short of breaking it will scarcely raise it. Look, my lads, at this elegant machine," said Mr. Finsbury: "it is a clepsydra, or water-clock. The ancients made much use of various forms of water-clocks,

and had none, indeed, but these and sun-dials to mark their time. A syphon here is employed to remove the water, instead of an orifice beneath. The action must be more uniform, as it is not interfered with by the differing weight of the column of water. This is a machine which I think you could make."

"Oh! can we, sir?" said the lads; "then I am sure we will try."

"I will assist you with a print and description I have at home," said Mr. Finsbury; "only on this condition, that, in future, you take great care not to waste the commodity it measures out to you—I mean, TIME. See! here is a patent machine for corking bottles, and one for filling them: an apparatus for *emptying* them we are already supplied with."

After about an hour more spent in viewing a vast number of miscellaneous articles, our party left the Repository highly gratified, and with considerable additions to their stores of knowledge.

The lads had noticed the long booth-like building standing opposite, before they entered the Repository; but Mr. Finsbury and his friend

thought that there would be an advantage in seeing that stupendous frame of mechanism, the skeleton of a whale, after the small results of human ingenuity had been examined.

"And now," said Mr. Hazelford, "having noticed a few specimens of man's handy-work, let us see an engine designed and made by the great Author of nature himself, and make our observations on the vast disparity between them."

"I scarcely know how to account for the fact," said Mr. Finsbury, "that, with regard to the doings of man, we almost always admire two things—*the work and the workman;* but, when the exhibitions of nature are before us, we seem to require an extra effort of reason and religion to remind us of the Grand Artificer. Let us keep in view now, if we can, that the apparatus within is an express witness to the existence, power, and wisdom, of an UNSEEN GOD."

With this impression, the party entered the Pavilion, as it is called, in which the stately remains of the monarch of the deep were laid out, or, rather, rebuilt for human gaze.

"Here is something more than admirable as mechanism," said Mr. Hazelford, stepping back: "here is an awful grandeur of structure, which almost silences one with astonishment. What think you, my lads?"

The boys seemed to be similarly affected, for they gazed with lengthened faces, and scarcely could utter a word at first.

"I should almost have thought it had been part of a very large ship," said Harold.

"There is indeed a resemblance in the framework of the body," said Mr. Finsbury. "Let us examine it more attentively, and we shall find it admirably arranged to sustain, in proper form, the prodigious *floating* mass of the animal. The vital parts, you see, were protected by ribs, twenty-eight in number, which are perhaps even stronger than the timber-ribs of a vessel of this size. Notice particularly the surprising substance of the bones in front of the chest, which had to resist the whole heaving force of the approaching wave. The fins, which appear scarcely of usual size on the living whale, are framed of arm and finger-bones seventeen feet long; and

these limbs work in a socket on a shoulder-blade of surprising expanse and strength.

"What part does the *whalebone* come from?" asked Edward.

"We will now view the head, and endeavour to find out," said Mr. Finsbury. "This part of the whale, you see, evidently is adapted, like a vast cavern, to receive shoals of small food, which require no violence to obtain. Here, therefore, are no *teeth*. One slip of whalebone is, you see, suspended perpendicularly from the upper jaw: of these there were four hundred on each side; so they formed a kind of cells, capable of retaining an adequate supply of food when once lodged in the mouth."

"I think," said Mr. Hazelford, "that it would have been well to leave more of those bony plates, whereby their place and purpose might have been better understood. The lower jaw seems to be a sort of hoop, to sustain the fleshy cavity of the bottom of the mouth. We may judge, from the size of these bones, what the power was by which they were moved."

"The *head* is twenty-two feet in length,"

said Mr. Finsbury, "and the whole animal ninety-five feet long; yet, you see, the eye was no larger than that of a bullock."

"Here, again," said Mr. Hazelford, "our own reason is able to discern wisdom. Had the eye been large, in proportion to the body, it must have been several feet in diameter, and would scarcely have escaped destruction a day. All the purposes of vision needful for the whale, are no doubt provided for by the eye, small and protected as it is. But we have not yet examined the vertebræ, forming the back-bone, on which the muscles of the animal are fixed, through a length of nearly seventy feet. What think you of it, my young friends?"

Edward asked why it was made in so many pieces.

"To admit of a certain degree of elasticity," said Mr. Finsbury. "In this way, as no doubt you know, the spine of all animals which have one is formed. This is a piece of mechanism which entirely baffles human imitation. To combine *strength and flexibility* thus, required the wisdom and power of a Creator. You see, the tail,

which is horizontal and crescent-shaped, is twenty-two feet wide, and must act upon a large mass of water. Nothing less than the substance and play of those sixty-two enormous bones, would have served the mechanical purposes required."

Before leaving, the lads noted in their memorandum book, the chief particulars they could learn respecting the size and weight of the fish. They were these:

	feet.
Total length of the whale	95
——————— head	22
——————— tongue	20
——————— vertebræ	69½
Number of the vertebræ	62
——————— ribs	28
Length of the fins and fingers	17
Width of the tail	22½
	lbs.
Weight of the fish	480,000
——————— oil	40,000
——————— flesh	170,000

They next entered one or two Bazaars, rather for the purpose of witnessing the mode of shop-keeping in other countries there exemplified, than with the design of buying or examining particular articles.

"These, to us, new sorts of markets, were copied, I believe, from the East Indies," said Mr. Finsbury: "they sprung up a few years ago, being introduced by a Mr. Trotter, and notwithstanding a considerable prejudice against them at first, I believe they now answer pretty well. Above four hundred female dealers are daily occupied in the sale of fancy articles of every kind; jewellery, watches, optical instruments, perfumery, stationery, books, prints, pictures, ladies' dresses, toys, and even pastry, may be had here for money, and not without; for I believe no credit is given."

Our friends purchased one or two trifling articles, and learned from the young person with whom they dealt, that about four feet of the long counter is called a counter there, and that for this three-pence a day is paid by the occupier; but generally, one person hires two, three, or four of these. They understood that establishments of the kind were rather on the increase; there being one in Soho Square, another in Bond Street, called the Western Mart, the Burlington Arcade in Piccadilly, and a very

extensive one in Portman Square, part of which was appropriated for the sale of horses, carriages, and harness.

Passing right and left down, through, and along a number of streets, Mr. Finsbury led his guests at length into St. Martin's Lane.

"I cannot think how it is," said Harold, "that the people in London find their way about: I had rather be in a wood."

"So would I," said Mr. Finsbury, "but not on account of any difficulty of making my way in London streets, but because a wood is a pleasanter place than a city. Persons from the country are very often at a loss, and sometimes they ask of uncivil wags, who direct them wrong. I knew one young prig, residing in Bucklersbury, half a mile to the east of St. Paul's, and his constant direction was, 'Go straight on till you come to Grovesnor Square, and then ask again;' thus sending a simple enquirer four miles to obtain the intelligence of his mistake. The best way is to ask in some respectable shop, where the chance of misdirection is not so great. Another awkwardness of country-folks, is their gaping,

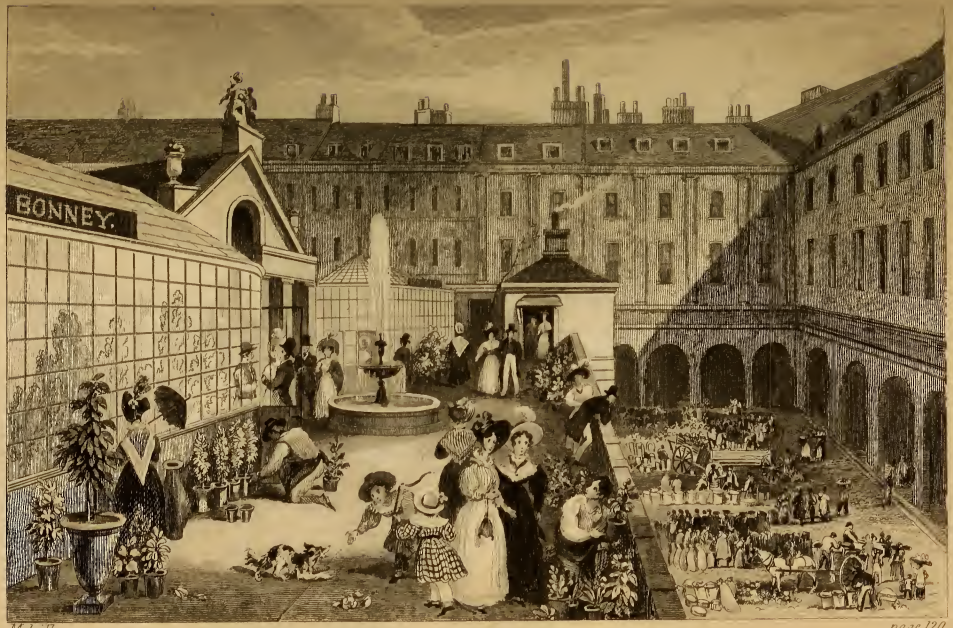
gazing way of standing to behold city wonders: if they do not get knocked down by a porter, who usually calls 'by your leave,' too late, they are sure to be laughed at, and stand a chance of being set upon by pickpockets, who soon discern a likely object for their tricks."

"I perceive," said Mr. Hazelford, "that there is a regular rule of procedure in the streets; each stream of pedestrians keeps its own side of the way."

"This is needful here as in driving," said Mr. Finsbury, "only the rule is reversed. In walking, the plan is always to give the wall to those whose right hands are next it. In driving, those we meet *pass us*, and we them, on the right."

"Where are we now, sir?" exclaimed Harold. "What a quantity of fruit and cabbages!"

"This is Covent-Garden Market," said Mr. Finsbury: "a sort of English bazaar, but of long standing, for the sale of fruit and vegetables. Many of these markets exist in the metropolis: the dealers are called salesmen, who do not in general vend their own commodities, but



Melville page 120.

COVENT GARDEN MARKET.

sell on commission for market-gardeners or farmers in the country. The extent of land is very great indeed, which, within a few miles of London, is devoted to the growth of table-fruit, and the more costly, as well as more abundant, table-vegetables. The produce of the hot-house finds its way hither as soon, or sooner, than my lord can obtain it from his own conservatory; and the quantity of apples, pears, potatoes, cabbages, &c. sold here in the season, would seem almost incredible. Those basket-women are waiting for an order from purchasers to carry their goods home for them. They will carry as much on their heads as some men can take on their backs. It is well to agree with them, if you can, and with all parties engaged here; for they are not very scrupulous in the terms and measure of their resentment, when offended."

Passing up a narrow street, in their way from Covent Garden, a crowd was observed round the door of a house, and a large covered van stood in the midst of the throng. The why and the wherefore, of course, was expected by our country youths.

"That is the famous public office of Bow Street," said Mr. Finsbury: "that is a king's van, about to take some transgressor to prison, most likely. Let us keep clear of the mob, for the company is not very select, and will not probably omit any opportunity of plunder even here."

"Are the thieves condemned there?" enquired Edward.

"For certain smaller offences, the magistrates have power, by what is called summary conviction, to punish evil doers. In other cases, they can only *commit* to prison, to take their trial by a jury. But here again the law provides a remedy against too hasty a proceeding; for persons called the grand jury are to examine the charges and evidence before trial, and say whether there is real cause to bring the party to his trial or not. If *not*, the bill of indictment is said to be *ignored;* otherwise, it is called 'a true bill.'"

AN UNEXPECTED ADVENTURE.

Mr. Finsbury's guests and household, had retired to rest, and had obtained about two hours' sleep, when a furious thundering noise roused even our youthful and somewhat wearied country lads. A loud shouting in the street, with the sound of many running feet, mingled with the din. Harold and Edward at length opened their eyes, when the fierce, red glare which lighted up the room, accomplished all that was needful to drive sleep away. "Fire! fire!" was the cry. Knockers resounded, bells rang, and the neighbourhood was up in arms.

By this time, Mr. Finsbury was in the lads' apartment.

"Get up, young gentlemen," he said, "and put your clothes on as quickly and comfortably as you can: there is a fire in the next street. Nay, don't be alarmed, there is no danger here. I only wish you to go with me and Mr. Hazelford a few steps to a friend's house, where we can get upon the leads and see a little."

Leaving trusty persons within, under strict orders from their master to open the door to no one, the party proceeded down Basinghall Street; Mr. Finsbury taking firm hold of the youths, and in a few minutes they reached the house of Mr. Burton, which had a full yet safe view of the flames. Entering by the back door, which opened into a court, Mr. Finsbury soon gained admission for himself and his guests: no waking was requisite, for all were stirring here.

Mr. Finsbury asked of his friend particulars.

"Four houses are down," said Mr. Burton, "and I fear three more must fall. Walk up."

By those who have been quite unused to the spectacle of dwellings in flames, there is experienced, as there ought to be, a thrilling and fearful sensation of awe and anxiety, of commiseration and dread; more especially when human lives are in peril. Mr. Hazelford strongly urged proceeding to assist.

"By no means do so," said Mr. Finsbury; "for this best of reasons—that as they have abundance of powerful and practised helpers, our proceedings would but embarrass theirs."

"Oh! dear Edward!" "Dear Harold!" said the lads, with faces as white and long as you please. "Oh! how dreadful! such a roaring noise; and what a hissing! What is that knocking, sir?"

"That," said Mr. Finsbury, "is the working of the engines you hear. See! see the streams of water rise far above the buildings, and descend in showers upon them."

"A humming, anxious noise amongst the crowd, apprised Mr. Finsbury that some important and doubtful effort was being made. Changing his position on the roof a little, he perceived the truth. A resolute individual had issued from one window, to which a ladder was applied; but, instead of descending by it, he stepped upon a narrow ledge three stories from the ground, and entered another, from whence volumes of smoke proceeded. He was absent two or three minutes. Ruddy flames started into that apartment, as the individual reappeared with two children in his arms. A shriek now proceeded from the crowd, which was quickly succeeded by a loud "Huzza!" thrice repeated,

as that courageous and determined man regained the window, stepped upon the ladder, and safely descended with his prize.

"These are the awful realities of life," said Mr. Hazelford, with strong emotion, "which some are called to encounter. Could *I* have done as much as that surprising man has accomplished?"

"Doubt it not, because you have not been called to the duty," said Mr. Finsbury. "That was the father of those dear children; and I believe so much for the honour of human nature, that there are few parents who would not do as much in effort, if not in successful result."

The news now transpired that all lives were out of danger. Our friends felt an insupportable burthen removed from their minds. The finishing act of a fire soon occurred,—the roof fell in with a tremendous crash; clouds of sparks, smoke, and dust, rushed forth for an instant; and very soon after, the flames were only visible on detached portions of timber about the ruins.

"Now you can say you have seen a London fire, my boys," said Mr. Finsbury.

But the lads were not ready with their accustomed alacrity to reply.

"What is the matter, Harold—Edward? are you too a little overcome?"

The fact was, that the disturbance and the excitement had proved a little too much for our young friends: they were faint, and trembled all over. Mrs. Burton, with much kindness, insisted on administering necessary refreshments to them and their friends. A glass of wine, a warm room, and a little soothing language, presently made all right; and, at about four o'clock in the morning, the party returned to Mr. Finsbury's house, where they resumed once more their repose."

After breakfast, which was not a very early one, Mr. Finsbury asked his guests if they would like to see the ruins. All were willing, and proceeded to the spot. What a spectacle! The place on which five houses had stood the night before, and where their numerous inmates had, with accustomed security, as they imagined, resided, was now apparently occupied only by one tall, unsupported stack of chimnies in the mid-

dle, whose stove-grates, at their several altitudes, still retained their places. The blackened ends of the neighbouring houses, whose stairs and apartments were now exposed, seemed almost hanging in the air. Their windows broken to atoms, and their drenched walls, showed the apprehensions and the efforts they had called forth; whilst the blistered shutters of the opposite houses clearly proved the intensity of the heat.

"Oh! what is that long thing like a great snake?" said Harold: "it reaches as far as that engine."

"That is the leathern pipe through which the water is discharged. You see, they can bring that into situations where the engine could not enter. It extends a great length for that purpose. See! they are using one now: parts of the ruins are smoking still. If you come round this way, you may peep in between the boards, and just see the remains of the grand feast that fire has had."

"It all looks like a heap of coals," said Edward.

"It looks nearly like what it is, I calculate," said Mr. Hazelford; "but I see those men in red jackets keep watch over them."

"Yes," said Mr. Finsbury, "they are firemen belonging to the insurance companies, who are obliged to be on the alert whilst the *salvage*, as it is called, remains unsorted. Here are scores of fellows and women waiting about for any chance that a moment's inadvertence on the part of those men might give them. Here, I see, are nine engines in sight."

Returning, Mr. Finsbury explained the measures which the legislature had adopted against the spread of fire, in the late building act.

"These," said he, "were all old houses, separated only by thin partitions, and perhaps even connected with each other by doors. By recent acts of parliament, no such houses can now be built in London. Party-walls, entire throughout, of a certain thickness, and dividing the roofs, must be carried up between all new houses; the expense to be equally shared by the respective proprietors. The fire of London, therefore, cannot occur again, as formerly. The bene-

ficial effects have frequently been experienced already. I have seen a vehement fire, which consumed a whole house in twenty minutes, but which had not the least effect on the adjoining dwellings; only perhaps raising the thermometer a few degrees higher."

"I should think that might be expected," said Mr. Hazelford.

"But," continued Mr. Finsbury, "it is astonishing to see the stupidity which needless fright makes persons exhibit sometimes on those occasions. I have actually seen furniture thrown from a three-story window, to prevent its being burned; and what is worse, persons will sometimes madly precipitate themselves, when there is no real need so to do."

The disturbance of the past night inclined our friends to remain at home that day. Mr. Finsbury had business at the west end with Mr. Hazelford, and Harold and Edward passed the time without heaviness, in recounting some of the wonders they had lately seen.

OPENING THE NEW LONDON BRIDGE.

When our friends visited this structure before, Mr. Finsbury was uncertain as to the possibility of procuring for his guests a view of the grand spectacle fixed for the 1st of August: he therefore refrained from mentioning the subject in any way that might cause disappointment. It happened, however, that a friend of his had interest with another friend by the water-side, whose warehouses were sufficiently near to enable him to gratify many to a great degree.

The grand attraction of the scene was, of course, the presence of the king and queen, who had engaged to honour the Londoners with a visit. The preparations for royalty on both sides the Thames, from Waterloo Bridge to that in question, had occupied several days. Boats and barges were formed into lines from Somerset Stairs to London Bridge, between which the procession was to pass. Many of these were

profusely decorated with flags: tiers of seats were raised on the toll-house of Southwark Bridge, and the road was much occupied with tents, platforms, &c. It must not, however, be supposed that the spectators at any one point could be aware, by observation, of these and the other particulars described. Mr. Finsbury procured the information in a proper form from those who had other means of knowing them, and thus our readers also may better understand the business of the day.

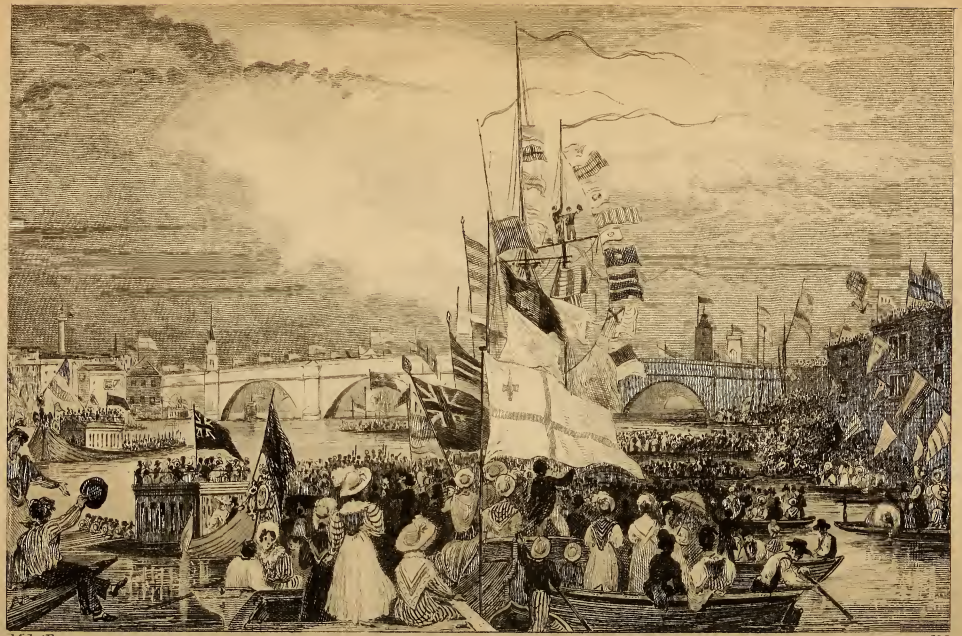
The preparations on the new bridge were upon a scale of tasteful magnificence. An awning, or pavilion, extending over a great part of the bridge, exhibited great skill in its design and execution; but that erected for their majesties and the other distinguished visitors, was still more splendid: it was on the London side. This pavilion was constructed chiefly of standards that had formerly waved over the armies of almost every civilized nation in the world, and was of a truly princely character. It was the whole breadth of the bridge. At the four corners were placed, upon broad pedestals, groups of men in

armour, which had an exceedingly picturesque effect. The pillars which supported this pavilion were adorned with flags, shields, helmets, and massive swords.

Their majesties' seats were beneath a gorgeous canopy of state, of crimson cloth, the back of which was formed of plate-glass. To the right and left of this canopy, were places for the members of the royal family, the ministers, and many of the nobility. By a proper arrangement of the tables, a large open space was preserved before their majesties, whose view of the whole of the company under the awning was free and unobstructed. From this pavilion, the awning extended along the bridge to the distance of about five hundred feet. On either side there were tables for the guests. On that part of the bridge which was not covered, the ornaments consisted of large flags, and these were placed at so small a distance from each other, that when swollen by the wind they nearly touched. Amongst them were the standards of the palaces of the chief foreign powers. Besides the flag of old England, were discerned the black eagles of Russia

and of Prussia, the keys and mitre of the pope, the richly emblazoned shields of Venice, of the king of the Two Sicilies and of Spain, the flag of America, and the colours of the Trinity House. On the London side of the bridge, the landing-stairs were covered with crimson cloth. A most sumptuous repast was provided, which was supplied with eight hundred dozens of wine!

The king and queen, with their attendants, left St. James's palace in twelve carriages: the party reached Somerset House at three o'clock, their arrival being announced by the hoisting of the royal standard of England over the centre of the building, which signal was followed by the discharges of cannon from the wharfs and barges, and loud cheering from the surrounding crowds. The embarkation was a scene of peculiar interest: the king, with the queen on his arm, descended the stairs, and stepped into the *royal barge.* All the party being on board, the procession moved on. It consisted chiefly of city barges, the decoration of one of which cost upwards of a thousand pounds. The great officers of state succeeded; then the royal barge,



Melville. *page 135.*

OPENING OF NEW LONDON BRIDGE.

AUG.T 1ST 1831.

with their majesties and numerous members of the royal family; a second royal barge, containing officers of the household; a third, containing ladies of the queen's establishment; the state naval barge, with naval officers on board; the navy-office barge, and I know not how many other vessels, superbly fitted up.

The scene at that moment was indescribably grand. The whole space within the lines, and a great part of that without, seemed one moving mass of resplendent magnificence; the flags and standards of every device and colour; the gay attire of countless thousands on the river and its banks; the waving of scarfs and handkerchiefs; the thunders of artillery, and the deafening shouts of the vast multitude; all contributed to give an effect to that memorable hour, of which none but those present could conceive. Our two country lads were wrapped in a kind of trance of astonishment. To point out this or the other object in particular, was out of the question: their eyes ached with looking, and their minds were impressed with an image which the years of a long life would scarcely efface.

The king and queen, happily, were soon recognised and distinguished by their condescending notice of the people. The affable courtesy of their sovereigns was the great source of applause and pleasure to the admiring crowds. On their barge reaching the stairs of the bridge, the king and queen were handed out by persons concerned in the management of the undertaking, the completion of which was now celebrated in so gratifying a manner. Upon stepping ashore, the king addressed them in the following words: "Gentlemen, I am very glad to see you on London Bridge. It is certainly a most beautiful edifice, and the spectacle is the most grand and delightful that I ever witnessed." The king then paused to survey the scene around him, and acknowledged the cheers of the vast assembly by taking off his hat and repeatedly bowing.

Upon reaching the top of the stairs, the sword and keys of the city were tendered to his majesty by the lord mayor, when the king returned them, signifying that they should remain in that gentleman's hands. The chairman of the committee then presented the king with a gold medal,

commemorative of the opening of the bridge, having on one side an impression of the king's head, and on the reverse, a well executed representation of the new bridge, with particulars of its foundation and completion. Soon after this, Mr. Green ascended in his balloon from the Surrey side; a spectacle which, as it was now exhibited by that *high-minded* personage for the hundred and ninety-second time, was not so new to the people in general as to our young friends, whose eyes wandered far from the splendours beneath, to trace the unknown voyage of the aëronauts. They descended in Surrey, at about thirty miles distance, in the evening.

The party having witnessed the balloon in its rise and course for some time, returned to the pavilion, and partook of the sumptuous banquet prepared for their refreshment. The king, on receiving a golden cup of wine from the lord mayor, said: "I cannot but refer, on this occasion, to the great work which has been accomplished by the citizens of London. The city of London has been renowned for its magnificent improvements, and we are commemorating an

extraordinary instance of their skill and talent. I shall propose the source from whence these improvements sprung—'The trade and commerce of the city of London.'"

Shortly after this, the royal party rose and retired, leaving the citizens to continue the entertainment at their pleasure. At about six o'clock they re-embarked, and proceeded on the river to the stairs of Somerset House.

Our friends, who had taken their station early in the day, and had been confined to a very narrow space on the seat assigned them, had by this time seen enough: they were highly interested, but fatigue at last rendered them desirous of the end of this grand pageant. It was long, however, before Mr. Finsbury thought it prudent for them to attempt making their way through the hurrying crowds around. At length he took an opportunity of leading the way through some of the less thronged streets, and in due time reached home, their eyes and ears still full of the things which had so long and exclusively occupied their attention.

THE NEW POST OFFICE.—A VOYAGE TO THE NORE.—THE TRAVELLERS RETURN.

Our adventurers were not engaged with all these matters in the same day; but we must include our notice of them in one chapter, or our intended little book may prove a great one.

"There is no country," said Mr. Finsbury, one morning, "which can compare with England in the facilities of correspondence by letter. Our new London Post Office, which has lately been built and opened for business, is somewhat more adequate, in appearance and extent, to this part of our national business, than the former uncouth building in Lombard Street. I have business at the new office this morning: if agreeable, we will go in company."

Arrived at the spot, Mr. Finsbury took his visitors to the pavement opposite the front, which gives the best view of the structure.

"I should have thought," said Mr. Hazel-

ford, " that half that edifice would have been enough for the purpose; but, of course, it was not swelled for show."

" By no means," said Mr. F. " although it is nearly four hundred feet long, one hundred and thirty feet wide, and sixty-four high. The amount of business transacted there is beyond any man's conjecture. The gross receipt of money for letters in the year 1827, was two millions three hundred and ninety-two thousand two hundred and seventy-two pounds! After deducting all expenses, government gained more than one million six hundred thousand pounds. In the time of Cromwell, when government first took the thing in hand, its revenue was ten thousand pounds: fifty years after it was a hundred thousand pounds. In the middle of last century, it had risen to two hundred and thirty-five thousand pounds; and towards 1792, it was six hundred thousand pounds."

" How many connexions and interests must have taken place, and been maintained, merely by this establishment!" said Mr. H.

" In fact, it makes any man a citizen of the

world," said his friend: "intercourse is opened not only with and between every city, town, and village in the kingdom; but messengers are dispatched all the world over by the same means. The business, therefore, is of course very complicated. There is the inland-office, in which are two hundred and thirty clerks and others employed: the returned letter office; the dead-letter office; the ship-letter office; the foreign office; the letter-bill office; the bye-letter office; and so on. There are nearly nine millions of letters received in London from the mail-coaches in the course of a year."

"I shall no longer wonder at the size of the building," said Mr. H.

"And now," said Mr. Finsbury, taking out his watch, "there is still time enough, I think, to allow of a little excursion, which perhaps may be somewhat more entertaining to our young masters here than the view of the Post Office, grand as it is. We have been rumbling about in carriages, or pacing the streets with weary steps; we will now go further with less trouble. I see, by this morning's paper, that a steam-

vessel will start in an hour for the Nore, for the benefit of some charity: we will make our way to the river, and be aboard in a trice."

"How good you are, sir," said Harold, gratefully looking up in Mr. Finsbury's face.

"I am sufficiently paid," said the kind-hearted and intelligent gentleman, "by the knowledge and amusement which I believe you have derived from your visit. I know yours is the age when the mind's eye is most clearly open; and it is a pity that important objects should not then be placed before it."

Once more the party found themselves on the banks of the Thames: a boat was not now necessary. They stepped from the quay along a plank, and were on board "*The River-Fly*" steam-boat in a very short time.

This was another new scene to young eyes. The vessel, the company, the management, the accommodations, called their attention every way at once.

"Is not this a very great ship?" enquired Edward.

"It is a mere boat, compared with many

around us," said Mr. F. "It differs too in other respects beside size: cannot you tell me in what?"

"Oh! it is so nicely painted," said Harold.

"And we have music here," said Edward.

"Come, look again at that large vessel lying close by; examine her apparatus for sailing, and then examine ours."

"I see no smoke coming from the top of their masts," said Harold; "but ours seems like a chimney. What is that rushing noise, sir? Dear me, all those ships are moving by us at once!"

"Nay," said Mr. Finsbury, laughing; "and do not you see that the old Tower of London is going with them?"

"Now I see, sir," said Edward, "*we* are moving; and yet how strange it is!—it almost seems as if every thing else was going instead."

"We are going," said Mr. H.; "and yet we have no sails, and what wind there is, is against us!"

"Do not you know this is a steam-boat?" said Mr. Finsbury.

"We had quite forgotten that," said the boys; "but I don't see yet how we move along."

"That rushing, splashing noise you hear, is occasioned by the fins of this great blowing fish. See now! the Tower, and Custom-House, and London Bridge, are already in the distance."

Mr. Finsbury then pointed out the parts of the vessel and machinery to the two lads, and explained all much to their satisfaction. The steam-engine they saw at work on such a scale as permitted them better to view and comprehend it than before. Up again upon deck, the scene on the river and its banks was greatly changed: the great mass of vessels was gone, and the banks showed something like green grass in places. The boys were astonished.

"The motion is indeed insensible below," said Mr. F.; "but the progress is swift and surprising, and all occasioned by the steam from a little boiling water, which wants to get away. It was long before steam-boats were ventured out at sea; but now they go, I believe to the East Indies.'

"How very ill that poor gentleman seems," said Harold, in a whisper: "I wonder what is the matter!"

"Perhaps you will know soon without telling," said Mr. Finsbury. "Come now below, and we will take refreshment."

A really elegant luncheon, or cold dinner, was now spread out, with a plentiful supply of the usual elements of good cheer. Ham and fowl, beef and veal, eggs and pastry, foaming ale and sparkling cider, crowned the board, to which our friends sat down with many others; some of whom appeared, by their dress, to be very stylish folks, but who, by their manner of eating and talking, somewhat dispelled that illusion.

But a good many, who had been very vivacious before, appeared suddenly changed, and addicted themselves to solemnity.

"Oh! I know what is the matter," whispered Harold: "they are sea-sick."

"You are a shrewd little fellow," said Mr. Finsbury: "mind you do not soon put on as long a visage as they."

"Oh! no, sir, we are quite well: shall we go upon deck?"

"Aye, we will."

But Harold no sooner reached the upper air, and saw the river-banks gliding past the vessel, than he staggered.

"What is the matter now?" said Mr. Finsbury.

"Oh! sir, I am sure I am not well at all," said Harold; and Edward soon communicated the same heart-rending intelligence. In short, they were not in the humour for any further novelties during the rest of the voyage. The feasting and music at the Nore; the fine width of the river at that part; Tilbury Fort, and Gravesend; stopping the engine, and setting her off again,—nothing external or internal had any charms for the poor holiday-makers now: indeed, they scarcely spoke, until they had returned to Mr. Finsbury's house, had a good night's rest, and found the steady forms of solid land about them.

The next morning brought an expected letter for Harold and Edward from West Hill House:

their aged grandfather wrote to them as follows.

"My dear Boys,

"I am sure your kind friends must be tired of you now, and I am tired of being alone without you. Tell Mr. Finsbury I shall be affronted, if he does not come and make my house his home this summer. Let Mr. Hazelford know that old England is the best place in all the world. I must see you to-morrow by coach—mind that. Tell Mr. Finsbury, there is a hamper for him at the inn; and I think he must be *hampered* enough with you already. Mr. Hazelford, I hope, will return here with you, to see you all safe.

Your affectionate

Grandfather,

SAMUEL HAZELFORD."

West Hill,
August, 1831.

Harold handed the note to Mr. Finsbury.

"Well," said he, "if so it must be, we must submit; but I shall feel as dull when you are gone, as your grandfather does now."

Every thing that could be thought of to render the departure of his guests comfortable and cheerful, was done by the friendly Londoner, Mr. Finsbury. He contrived to put several very handsomely bound volumes respecting the metropolis and its wonders into their trunk, with other presents. He went with the party to the Bull Inn, saw them and their luggage safely in the stage, and returned to his own house.

Mr. Hazelford, and the two objects of his charge, in due time drew near the well-known spot. The church tower, the windmill, the new bridge, and finally, the green gate, the old house, and their venerable relative standing at his door, who was getting a little fidgetty about *time*, soon convinced them that they were no longer at Mr. Finsbury's. The old gentleman's face moved, and he shed a tear as he drew them in. Bridget was all life and joy, but remarked how dingy folks looked that came out of London smoke.

Mr. Hazelford, our American friend, continued at West Hill House a fortnight longer, and assisted the lads in their loquacious account of the "Month in London."

FURTHER PARTICULARS OF LONDON.

We have not thought it advisable to interrupt our narrative of the "Month in London," by the matters announced for this chapter, because they were not circumstances which could come sufficiently under the *observation* of our young friends during their short visit. Mr. Finsbury supplied the information in the form of books upon the subject generally; and we hereby present our readers, in conclusion, with a few pages, in order that they may not be quite at a loss, nor think our little book incomplete.

We know not how old London is; that is, we cannot tell when it was that Britons first thought of forming a town or city there. Although learned men may regret this want of knowledge, I am not afraid that youthful enquirers will sigh much on account of their ignorance on this point.

It will be sufficient to say, perhaps, that Cæsar, who invaded Britain about fifty years before the time of Christ, found a settlement of the ancient inhabitants on the same spot. It was then a small village, consisting of wicker-work and straw-roofed huts, surrounded by woods and marshes. When this became a Roman colony, the first improvements were made, and the place began to have a name in history. It was surrounded by a wall of defence, and was placed under regular government and city laws. In about four hundred years, we find that nearly a thousand vessels were employed in trade with this port. The residence and rule of the Romans here is proved not alone from history: innumerable remains of their foundations, sepulchres, urns, pottery, coins, and pavements, have been turned up from time to time; and there is no difficulty at all in ascertaining to what nation these things must have belonged.

London having been made by the Romans a place of considerable extent and importance, continued to be such under all the succeeding powers, (Saxon, Danish, Norman, and again

English,) which have obtained the dominion. But its rise and increase were continually checked by calamities with which happily London has not been for many years afflicted—war, famine, and pestilence: these awful visitations often happened in train, and occasioned each other. Fire, also, although frequent enough now in single dwellings, is comparatively harmless, when we reflect that London, when formed of thatched and wooden houses, was repeatedly destroyed in former ages. The houses and churches, however, were rebuilt and greatly improved, as civilization advanced; and so long as a thousand years ago, edifices were raised of which any modern architect would be proud.

The Doomsday Book, which contained an account of nearly all the estates in the kingdom in the reign of William the Conqueror, tells us that Holborn then consisted of only a few little houses on the banks of a small river, called the Old Bourn; and Norton Falgate was a small *rural* manor belonging to St. Paul's. There were then two castles within the city, besides the Tower. In the reign of Stephen, it does not

appear that London exceeded the extent of one of our middling country-towns, yet it continued gradually improving.

There is a curious account of London, written by a monk of Canterbury, nearly seven hundred years ago. It appears that the city was then bounded on the land side by a high wall, furnished with turrets, and seven double gates. Between Westminster and the city, were some miles of beautiful country, consisting of gardens and orchards belonging to the citizens, who were themselves every where known and respected above others, for their civil demeanour, their goodly apparel, their well-furnished tables, and their discourse! On the north of the city, that is, where squares and streets innumerable now stand, were open meadow and pasture-lands; and a little beyond, a great forest, in the woody coverts of which lurked the stag, the wild boar, and the bull. With the three principal churches were connected three famous schools: upon holy-days the scholars, flocking together about the church, where the master had his abode, were accustomed to argue on different subjects, and

to exercise their abilities in oratorical harangues. The handicraft men, the venders of wares, and the labourers for hire, were every morning to be found at their distinct and proper places, as is still common in the bazaars of the east; and on the river's bank was a public cookery and eating-place belonging to the city, where whatsoever multitude, and however daintily inclined, might be supplied with proper food. Without one of the gates also, in a certain plain field, (Smithfield,) on every Friday, unless a solemn festival, was a great market for horses, whither earls, barons, knights, and citizens, repaired to see and to purchase. To this, city merchants brought their wares from every nation under heaven: the Arabian sent his gold; the Sabæans spice and frankincense; the Scythians armour; Babylon its oil;* Egypt precious stones; India purple vestments; Norway and Russia, furs, sables, and ambergris; and Gaul, its wines. "I think," continues this writer, (Fitzstephen,) "there is no city that hath more approved customs, either

* Our readers are at liberty to *doubt* the correctness of the old historians in *some* of these particulars.

in frequenting the churches, honouring God's ordinances, observing holy days, giving alms, entertaining strangers, and so on. The only plagues are the intemperate drinking of foolish people, and the frequent fires."

Such were the observations and notions of our ancient historian. From others who have written upon London, we collect information respecting it in succeeding ages. It was long indeed before the metropolis of England exhibited signs of splendour, or even of comfort, in its streets and houses. In the time of Edward the First, six hundred years ago, the dwellings in London were chiefly built of wood, and thatched with straw or reeds; the latter obtained from the *fens of Finsbury, or Moorfields!* Many brooks and small rivers ran into the Thames through the city: some of these are now directed into other channels, and others are covered over. It was customary, at one time, for the lord mayor, accompanied by the aldermen and certain citizens on horseback, to visit the spring-heads annually in September, where they hunted *a hare* before dinner, and *a fox* after it, in *the fields of St.*

Giles's. In the reign of Henry the Fifth, the city was first lighted at night, by means of lanterns hung on ropes, which extended across the streets. In the fifteenth and sixteenth centuries, London had but a wretched and comfortless appearance, at least so we should now think. The streets were obstructed by lay-stalls, the sewers were insufficient drains; few streets were paved at all, and the houses leaned over so far, that they almost met at the top, whilst the space below was obscured by innumerable sign-boards, for then every trade almost had its sign, which projected across the way into the street. As to the interior of the dwellings, Erasmus tells us that the floors were commonly of clay, strewed with rushes, which were sometimes renewed, without however removing the collection of untidy matters beneath them. Even in the reign of Elizabeth, the presence-chamber of Greenwich palace was strewed with hay, according to the English fashion.

To those of our readers who are acquainted with London in its *present* state, the description of it in the time of Elizabeth, when it was

thought too *large*, cannot but be surprising and curious. Almost the whole metropolis was then contained within the walls, in which were many gardens and waste places. Cattle grazed in the neighbourhood of the Tower. The Spitalfields were then separated from each other by hedges and rows of trees. Houndsditch had only a few houses, whose gardens opened towards the fields. Moorfields lay open to Hoxton, and many windmills were situated in Finsbury fields. Holborn was a village, as we have said. St. Giles's was another village, quite separated from London. The Strand had gardens on each side, and contained only a few houses of the nobility. Covent Garden was a *convent* garden; but I doubt much whether it was quite *so productive* as at present! Westminster was a small town quite distinct from London. Yet so strangely afraid was Elizabeth that the extent of the city would cause frequent pestilence, that she strictly prohibited the erection of houses on new foundations. Her commands, however, in this respect, were not very carefully obeyed, for London continued to spread notwithstanding.

It is probable, that London would have presented a far different appearance now, and have resembled the ancient city much more nearly, had it not been for the most surprising event of the kind recorded in history. This was the great fire, which happened in September, 1666, in the reign of Charles the Second. We ought, however, to notice an event of another kind, and even more awful, which happened just before; I mean the great plague. This pestilence had frequently visited the metropolis in former ages, and had destroyed thousands at each period; but from December, 1662, to January, 1666, it cut off above a hundred thousand persons, and caused a complete stoppage to business, so that grass grew in the Royal Exchange. Pits were dug to contain the bodies, and carts went round by night, with the doleful cry "Bring out your dead! bring out your dead!" The streets by day, were silent and solitary, the shops were closed, and society seemed to have undergone a dissolution.

Now it has been thought, that the great fire which happened the year following, though a

grievous calamity, was not without its use in consuming those dwellings and property, which might have retained the lurking contagion amongst them. It commenced, we know not how, two hundred and two feet from the spot where the Monument now stands, which distance is the exact height of the column, and raged with irresistible fury four days and nights, in which time it destroyed four hundred streets, thirteen thousand two hundred houses, eighty-nine churches, besides chapels, four of the city gates, and a vast number of the most important and stately public buildings of the metropolis. It is supposed, that property to the amount of ten millions was consumed. When the fright was over, an act of parliament for rebuilding the city was passed, and it gradually arose from its ashes. London, therefore, does not exhibit many architectural antiquities: only a few churches escaped, so that what we now see, are comparatively modern.

We shall take notice of one more event in the history of London; of which, I doubt not, many of my readers have heard their parents speak. I mean the riots of 1780.

We have grown so far wiser now, that we do not persecute persons for exercising the rights of conscience in religious matters. The Roman Catholics have lately been relieved from oppressive laws, under which they long laboured. In the year 1780, a petition was framed, to be presented to parliament against the relief to the Catholics which had then been afforded; and the mob, on this occasion, seemed to be not exactly in the humour of humble petitioners to their rulers. They surrounded the Parliament Houses, to the number of many thousands, with Lord George Gordon at their head, who, there is little doubt, was insane. After having in vain attempted to force open the doors of the House of Lords, they separated into parties, and began the work of devastation. They quickly demolished the Catholic chapels, the prison of Newgate, several public offices and mansions of the nobility; and threatened to pull down the Bank, the Temple, the royal palaces, and the Arsenal of Woolwich. For some time, they set all opposition at defiance; thirty-six fires were seen blazing at once; the great dis-

tilleries were broken into; and the streets flowed with the liquor, which caused, by intoxication, the death of many. Now were heard the mingled shouts of the lawless multitude, and the firing of the military; who were at length called in to the assistance of the civil power. Business was suspended; sleep and rest were impossible to the distressed inhabitants: at length the arrival of fresh troops, and the certainty of destruction in resisting them, brought the insurgents to something like reason. They abandoned their work of ruin, but not until three hundred lives had been sacrificed, and property to an incalculable amount.

And now we must give a short description of London as it exists at present. Our information must be drawn from various sources, and quite distinct from what could be afforded by a mere visit of a month or a year. Walking, riding, sailing, even balloon-flying, will not avail to give that knowledge to any one enquirer, which books, the result of enquiries by very many, will afford us.

London, seated on both sides of the Thames, is

about sixty miles from the sea. It is distant, from Edinburgh three hundred and ninety-five miles, Paris two hundred and twenty-five, Berlin five hundred and forty, Vienna eight hundred and twenty, Petersburgh one thousand one hundred and forty, Rome nine hundred and fifty, Constantinople one thousand six hundred and sixty. Very few spots could have been selected so well calculated for a vast city, as that on which our metropolis stands. By the side of a noble river, on an extended plain, or nearly so; supplied with a soil, which forms the finest bricks, and possessing an air, naturally salubrious; it is no wonder that London, aided by the known genius and enterprise of Englishmen, has increased to a first-rate capital.

It comprises, in fact, at present, three (once distinct) towns or cities, and I know not how many neighbouring villages; so that it is difficult, as we have seen, to draw the line and say—here London begins or ends. Its extent of united buildings from east to west, is fully seven miles and a half, and its breadth is above five miles; the circuit cannot be less than thirty

miles. Including the space occupied by the Thames, this extent is equal to eighteen square miles. London may be divided into six parts, of which the city is the central, and most ancient portion. This was long the grand metropolis of commerce and manufactures, and is still occupied almost entirely by shops, public offices, and conveniences for work and business. The western suburb includes Westminster, and the streets by which London joins it. Here we find royal palaces, residences of many of the nobility, the houses of parliament, and courts of justice, with various government-offices, theatres, and so on. The north-west part, is now the most splendid and fashionable part of London. This, with the last division, forms what is called the west end of the town. The northern part includes the several villages of Hoxton, Islington, Pentonville, Somers-town, St. Pancras, and some others. The east of London is its least attractive part, and is that by which our travellers entered on their visit. Towards the river, the inhabitants of this east end of the town, are much occupied with shipping, and naval commerce.

The south of London comprises that vast assemblage of buildings which, skirting the Thames from Rotherhithe to Vauxhall, extends more than two miles from the river side. This includes the ancient borough of Southwark: in which are innumerable manufactories of various kinds; as iron-foundries, glass-houses, dye-houses, shot-manufactories, breweries, distilleries, and so on.

Now we may form, perhaps, some idea of the size of London, by reflecting that it contains seventy squares, nine thousand streets, lanes, alleys, &c. and about one hundred and sixty thousand houses! whilst the inhabitants amount to the astonishing number of one million three hundred thousand.

Now, as, unfortunately, these are not *all* good, quiet people, who are content to mind their own business, various institutions and offices of government for the metropolis have been appointed, and are maintained. The chief magistrate of the city, is the Lord Mayor, who with the aldermen and common council, form a sort of legislature for the capital, with the sheriffs

to undertake the punishment of offenders. These worshipful personages, form what is called *the corporation of London.* The ninth of November, when the new lord mayor enters upon office, is a grand show day in the city. His lordship proceeds from Guildhall to Blackfriars Bridge in his state coach, attended by the sheriffs in their state carriages, by the aldermen in theirs, and the livery of London in their gowns. At the bridge, all these embark on board the state barge, and the several trading companies also proceed in their own splendid vessels, and accompany the corporation to Westminster. Now is the time to be on Westminster, or some of the nearest bridges; at least for those few country folks, who have never seen any thing more striking than a recruiting party with their cockades. The lord mayor's business at Westminster, is, to be sworn in at the various courts of justice; when he receives, generally, a solemn exhortation from the judges, who afterwards dine with him at the city feast. The party then retur nto their barges, accompanied by hundreds of boats, and viewed by countless spectators,

who line the river banks. Bands of music, and every imaginable means of the kind, keep up the interest of the occasion. On relanding at Blackfriars Bridge, the procession now increased by a number of horse and footmen, in polished steel armour, returns to Guildhall, where a grand dinner and ball are given, at which the ministers and great officers of state, and many of the nobility, are commonly present, besides at least one thousand of the most opulent male and female citizens. The expense of the entertainment is usually about three thousand pounds, of which my lord mayor is expected to pay half.

Persons used to London are seldom so much off their guard as to be plundered by thieves as they go along the streets. However, to provide against such occurrences, and other acts of fraud or violence, public offices are open, where magistrates and officers attend to give needed assistance. Besides this, street-keepers, new policemen, and watchmen at night, are always at hand, and thus the ways are kept pretty safe and quiet. Mark too that there are watch-houses, in which

disorderly persons, who are out late without apparent cause, may be accommodated with a lodging, and a morning call on the magistrate on the succeeding day. It is therefore as well to take care, lest, through ill designs or negligence, our worthy selves should happen thus to be unexpectedly situated.

And now we must say a word or two respecting those public buildings of the metropolis which our country friends had not time to examine particularly.

The Tower of London is the most interesting building of the kind, perhaps in England. Connected with the capital, it has been the scene of innumerable events combined with the destinies of our ancient rulers and nobles. We have not room to recount these, and, indeed, the narrative rather belongs to the English history of the periods. There is reason to believe that a fortress existed here before the Norman invasion. It was, however, William the Conqueror who commenced the present edifice, to overawe the somewhat discontented citizens of London. That part called the White Tower,

was his especial work. Succeeding kings enlarged, repaired, and strengthened it from time to time. The ditch which surrounds it was cleansed and deepened as lately as the winter of 1830. The space within the line of this moat contains several streets and houses distinct from the ancient fortress, but yet under its protection and government.

The Tower is almost the only place to which our readers are likely to have access, wherein the ancient form, appurtenances, and routine of a castle are kept up and exhibited. Here are a draw-bridge, donjons, towers or keeps, mounted guns, a surrounding moat, gates, and a portcullis, with many other matters generally disused now, but which existed once about the residence of every powerful nobleman in the kingdom. The care and order observed every morning and evening in opening and shutting the gates, are at least curious for the antiquity of the custom. In the morning, the yeoman-porter, with a serjeant and six men, goes to the governor's house for the keys. Having received them, he proceeds to the innermost gate, and passing that, it is

again shut. He then opens the three outermost gates, at each of which the guards rest their firelocks while the keys pass and repass. On his return to the innermost gate, he calls to the warders on duty to take "*King William's keys*," when they open the gate, and the keys are placed in the warder's hall. At night, the same formality is used in shutting the gates. As the yeoman-porter with his guard is returning with the keys to the governor's house, the main guard, which, with its officers, is under arms, challenges him with, "*Who comes there?*" He answers, "*The keys.*" The guards, by order, rest their firelocks, and the yeoman porter says, "God save King William!" the soldiers answering, "Amen!" The keys are then left at the governor's house, after which none can pass without permission, and the watchword of the night.

It must not be supposed that *all* this precaution is quite useless at present; for the Tower is a grand repository of national arms, stores, treasures, and records; and the intrusion of unknown strangers without leave might lead to the most dangerous consequences.

The parts of the Tower usually shown to visitors are, *The Lions' Tower*, or menagerie, built by Edward the Fourth, now containing a fine collection of wild beasts; *The Spanish Armoury*, in which are contained the trophies of Queen Elizabeth's famous victory over the Spanish Armada. Here too are shown the axe which beheaded Ann Boleyn, and a representation of Elizabeth on horseback. *The Small Armoury* is one of the finest rooms of the kind in Europe: it is three hundred and forty-five feet long, and sixty wide, and contains arms for a hundred and seventy thousand men. *The Royal Train of Artillery* is a vast room, hung round with various implements and warlike trophies taken from the enemy. Tremendous pieces of cannon, some of them of ancient date, are exhibited here.

The Horse Armoury is an exceedingly interesting sight. The suits of armour belonging to the chief personages of English history are here regularly arranged, from Edward the First to James the Second.

The Jewel Office will strike the attention of

some more than any thing else in the Tower. The splendid valuables here, called the Regalia, are not to be equalled by any similar collection in Europe. The crowns, old and new, with various implements of magnificence used at coronations, are worth some millions of money, loaded as they are with precious stones of the finest size and lustre. A sort of closet is made for them, fenced with strong bars, and receiving no light but that from a brilliant lamp, which is constantly burning. On Tower Hill, the spot on which state offenders used to be executed, is now erected a large building, called The Mint, where the coin of the kingdom is produced by machinery.

As few of our readers will have any curiosity to satisfy regarding the colloquial dealings of the noted personages of the fish-market, Billingsgate, we shall not detain them at the river side, but proceed next to that grand commercial building, the India House. Our limits, however, will admit of but a very slight notice of this and the other edifices of London. The India House is in Leadenhall Street, and is the place where the home business of the great trading chartered company to the East,

is transacted. The business of a vast empire, and its most extensive traffic, is here arranged, and sales of their produce are effected. The present building was erected about thirty-two years ago, and is considered a fine example of civil architecture. The greater part may be seen by strangers free of expense, and the rest by a trifle to the porters. A museum, containing various oriental curiosities, is exhibited to those who take the proper means of admission.

The Royal Exchange is the noblest monument we have of the public spirit and munificence of an individual. Sir Thomas Gresham, in 1566, offered the city of London to build them an edifice for the public resort of their merchants and others from foreign nations, if they would find him the ground. The offer was readily accepted, and a building, then called the Burse, was raised at his sole expense. Queen Elizabeth, however, at a grand city entertainment, gave it the name it now bears—The Royal Exchange.

It is a large quadrangle or square, the sides of which are formed by buildings resting on open

arches. Under these the various merchants meet and deal according to their several purposes, and in their peculiar tongues. The hum and bustle of this busy scene, in the middle of the day, cannot but be highly curious and interesting to strangers. Each side of the square is furnished with statues of the sovereigns of England, beginning with Edward the First, and ending with George the Third. There is a statue of Charles the Second in the centre, in whose reign the present structure was built, the old one being destroyed by the fire of London.

And now for the Bank of England. It is but little we have opportunity to say, and therefore we must make haste and say it. This is so immense and varied a building, calculated as it is for the grand money transactions of the government and kingdom, that a volume might be written about it. It is about a hundred years since the first stone of the present building was laid on the ground occupied by the house and garden of the first governor, Sir John Houblon. It was, however, only a small part of the build-

ing that was then erected. It has been enlarged from time to time, and now is one of the noblest structures in the metropolis. It is built on the pattern of various Grecian and Roman edifices, and combines strength, beauty, and convenience, in a high degree. The south side measures three hundred and sixty-five feet, the west four hundred and forty, the north four hundred and ten, and the east two hundred and forty-five feet. Within this space are nine open courts, a spacious rotunda, numerous public offices, court and committee-rooms, an armoury, &c., engraving and printing offices, a library, and many convenient apartments for officers and servants. Below are vast vaults for the coin and bullion.

As public buildings have more than once fallen in London before the power of mobs, the Bank has been constructed in so judicious and substantial a form, that no fears are entertained for its security on that head; nor, I am happy to say, on any other, that I know of. The company, therefore, may safely be entrusted with our young friends' savings; and be it remem-

bered, that many who possessed thousands there, *began* by laying up small sums of money.

Admission to the Mansion House is frequently gained by the introduction of a police-officer, who may place street offenders very unexpectedly in its magistrate's court!

The inside of this official residence of the lord mayor is rather magnificent than convenient. The rooms are too dark, and the style of decoration is heavy; but many improvements have recently been made. The state bed cost three thousand guineas! Now, either its occupants sleep ill in it, or its splendours are lost upon them. The Egyptian Hall and ball-room are highly worthy of attention, especially when lighted up for company.

Guildhall is not far distant. It is partly ancient, and partly new. It is the public hall of the city of London, in which are held various courts, the meetings of the citizens to elect their members of parliament and city officers, and in which most of the grand metropolitan entertainments are given. In the year 1814, the allied sovereigns honoured it with a visit: their enter-

tainment cost twenty thousand pounds! The hall itself is the large Gothic apartment into which strangers first enter: it will contain more than six thousand persons—I suppose *standing*. Two rude and barbarous figures at the western end attract the notice of the vulgar: they are called Gog and Magog, and are supposed to represent ancient Saxon personages.

Passing hence down Cheapside, near the end, we gain a sight of the proud dome of London—St. Paul's Cathedral. We can do scarcely more than take our twopenny-worth of observation on the occasion, which is but a glance at the fabric. We may observe, first, that an edifice for Christian worship has existed on this spot nearly one thousand three hundred years. The old cathedral was the most stupendous ecclesiastical structure in the kingdom. It had a tower of vast dimensions in the centre, which, with its spire, was five hundred and twenty feet in height. But the building was so much damaged by the great fire of 1666, that it was determined to take it down, and build afresh from the ground: this was accomplished, as I suppose every one knows, by

Sir Christopher Wren. The dimensions strike the eye as magnificent, without reference to the exact measurement, which, however, we give. The length is five hundred and fourteen feet, the breadth two hundred and eighty-six, the diameter of the cupola one hundred and forty-five; the whole height four hundred and four feet, whilst the grand circumference of the building is two thousand two hundred and ninety-two feet!

The effect to the eye, within or without, is indeed magnificent, and is peculiarly impressive, when we reflect that the whole was planned under the narrow canopy of one head, which arranged, with successful science, the innumerable portions of the stupendous fabric!

From the floor to the whispering gallery are two hundred and eighty steps, and to the ball in all six hundred and sixteen. The weight of the copper ball is five thousand pounds; that of the cross three thousand three hundred and sixty. The extent of ground occupied by the cathedral is more than two acres. It was built at the national expense in thirty-five years, and cost a

million and a half of money. It was completed in 1710. The bell of the clock has been heard at twenty miles' distance: the hands of the dial are nine feet long.

We must now pass on to Westminster, unable to notice a number of grand buildings, civil and religious, on the present occasion. We proceed under Temple Bar, the only one of the city gates left standing. Westminster-Abbey, or *West-monastery*, is an object possessing an equal degree of interest with St. Paul's; to some perhaps, superior, but it is of another kind. Here we see the genius, science, and zeal of ancient days, remaining still an object of admiration, even to the least informed spectator. The monastery was originally founded by one of the Saxon kings during the Heptarchy; but being destroyed by the Danes, was rebuilt by another of those princes, and again by Edward the Confessor. One of the popes made it a place for the inauguration or assumption of royalty, by the kings of England. The greater part of the present church was built by Henry the Third, and Edward the First; but many additions have since been made

to it. It is now a beautiful specimen of a sort of architecture, of which the metropolis has not many examples—the Gothic or pointed style. The two western towers, the rich windows, arched buttresses, the groined and fretted roof, clustered columns, stained glass, and ancient monuments, (amongst which are the tombs of many of our early kings, chief statesmen, and men of genius;) all these things combine to render Westminster Abbey, though not so vast a structure as St. Paul's, one as well calculated to occupy a leisure day, and to afford many succeeding subjects of reflection.

Immediately behind the choir of the church, is the chapel of *St. Edward* the Confessor. In this chapel is the tessellated shrine of its reputed saintly founder, whose remains are enclosed in an iron-bound chest in the upper part. Here likewise are the monuments of Henry the Third, Edward the First, Queen Eleanor, Henry the Fifth, Edward the Third, and of many more, famous in British history. On a wooden bar, that extends between the entrance-towers, is the helmet worn by Henry the Fifth, at the battle

of Agincourt; and against the columns are his shield and war saddle. The coronation chairs of the sovereigns of this kingdom, are preserved under this venerable roof. The oldest was made in the time of Edward the First. Beneath the seat, is the far famed stone, brought by that ambitious spoliator, from Scone in Scotland, on which their ancient kings were crowned. The prophetic tradition concerning it was, that wherever that stone was moved, the kingdom would remove with it. The prediction seems accomplished now, although it certainly was not so until the union of the crowns.

An angle of this edifice has been set apart for the muses, and has obtained the appropriate name of Poet's Corner. Monuments containing the great names of English literature, are here arranged by themselves.

Adjoining to the east end of the Abbey Church, is Henry the Seventh's Chapel, the most elaborate specimen of gothic architecture in the metropolis. It was built by him, as a place of interment for himself and family. The whole interior is covered with a net-work of tracery and

gothic chiseling. Until the time of Charles the First, none but royal bones were permitted to repose here; but since then, a great number of other illustrious persons have been admitted.

At a short distance from the Abbey, and from each other, are the two Houses of Parliament. The House of Commons was a beautiful building, dedicated to St. Stephen, and given by Edward the Sixth to the Commons for their accommodation whilst sitting. The interior of the House of Lords, is hung with celebrated tapestry, representing the defeat of the Spanish Armada.

THE END.

Joseph Rickerby, Printer, 3, Sherbourn Lane.

INTERESTING WORKS,

PUBLISHED BY

HARVEY AND DARTON, GRACECHURCH STREET.

Works by Maria Hack.

GEOLOGICAL SKETCHES, and GLIMPSES of the ANCIENT EARTH.

With Maps and Illustrations. 12mo. cloth bds. Price 9*s*.

ENGLISH STORIES,

Illustrating some of the most interesting Events and Characters from the accession of Alfred to the Reformation under the Tudor Princes. 3 vols. Price 1*l*. 1*s*. in boards; or separately, price 7*s*. each volume.

"These volumes impart correct historical knowledge, and at the same time convey beautiful lessons of morality, the highest and best use of history."
Journal of Education, April, 1831.

GRECIAN STORIES;

Taken from the works of eminent Historians. A new edition, in which the explanatory Remarks formerly given in Conversation are incorporated in the Narrative, as a Class-book for Schools. 18mo. Price 3*s*. in boards.

FAMILIAR ILLUSTRATIONS

Of the principal Evidences and design of Christianity. 18mo. Price 3*s*. in boards.

WINTER EVENINGS, or TALES of TRAVELLERS:

Being interesting Narratives from the works of celebrated Travellers: abridged, and interspersed with such Questions and Explanations as are likely to make every circumstance intelligible. Four vols. half bound. Price 10*s*.

"In her 'Winter Evenings' Mrs. Hack has had the happy art of condensing all that is interesting and amusing in the best narratives of voyagers and travellers."
Journal of Education, April, 1831.

HARRY BEAUFOY; or, the PUPIL of NATURE.

Founded on Dr. Paley's Natural Theology, but suited to the comprehension of Children. One vol. 18mo. 2*s*. 6*d*. half bound.

"In this little volume the mechanism of the human frame is explained so simply and so clearly, that children of ten years old can fully understand and take an interest in the perusal."—*Journal of Education, April*, 1831.

STORIES OF ANIMALS,

Intended for Children between Five and Seven Years old. 16mo. half bound Price 2*s*. 6*d*.

Second Series of Ditto, price 2*s*. 6*d*. half bound.

ORIENTAL FRAGMENTS.

Price 3*s*. 6*d*. boards.

A GEOGRAPHICAL PANORAMA;

Exhibiting characteristic Representations of the Scenery and Inhabitants of various Regions. The Panorama consists of nine principal Scenes, each capable of several variations, correctly designed, and elegantly coloured after Nature; representing the Scenery, Costumes, &c. of Arabia, Hindostan, the Frozen Ocean, Italy, Kamtschatka, Otaheite, Lapland, and Turkey. With a Book of Explanation. The whole contained in a neat Mahogany Box, with a splendid emblematical Title. Price 3*l*. 3*s*.

The NEW ESTATE; or, the Young Travellers in Wales and Ireland. With Plates. 12mo. half bound. Price 7s.

FIVE YEARS OF YOUTH; or, Sense and Sentiment. By H. MARTINEAU. With Plates. 12mo. half bound. Price 6s.

BEN HOWARD; or, the Pedlar and the Publican. By the Author of "Poor Child's Friend." 18mo. half bound. Price 2s. 6d.

LECTURES ELEMENTAIRES, pour les ENFANS: avec une Traduction Interlineaire en Anglois, pour faciliter aux Commençans l'Etude de la Langue Française. 12mo. sheep. Price 2s. 6d.

ELEMENTARY LESSONS for Young Children. From the Italian of COUNT G. BARDI. Being a free Translation of the above. 18mo. half bound. Price 1s. 6d.

An ABSTRACT OF ANCIENT HISTORY, from the earlient Records to the time of Xerxes; intended as an Introduction to the Grecian and Roman Histories used in Schools. By Mrs. T. W. PERCIVAL. Half bound. Price 5s. With Plates.

ALFRED DUDLEY; or, the Australian Settlers. 12mo. half bound. With Plates. Price 5s.

CHILDREN AS THEY ARE; or, Tales and Dialogues for Youug Children. With Plates. Price 6s. half bound.

PORTUGAL; or, the Young Travellers. Being some Account of Lisbon and its Environs, and of a Tour in the Alemtéjo, in which the Customs and Manners of the Inhabitants are faithfully detailed. From a Journal kept by a Lady during three Years' actual Residence. With engraved Views. Price 5s. 6d. half bound.

MORNING WALKS; or, Steps to the Study of Mineralogy. By the Author of "Morning Conversations." 12mo. half bound. Price 7s. With Plates.

Published by Harvey and Darton.

ROBINSON CRUSOE. A New Edition. With many Plates. 12mo. half bound. Price 6s.

VARIETY; or, Selections and Essays, consisting of Anecdotes, curious Facts, and interesting Narratives. By PRISCILLA WAKEFIELD. 12mo. half bound. Price 5s. 6d. With Plates.

RUDIMENTS of CONCHOLOGY, designed as a familiar Introduction to the Science. With explanatory Plates, and References to the Collection of Shells in the British Museum. By MARY ANNE VENNING. Price 3s. 6d. plain, and 6s. coloured. Half bound.

RUDIMENTS of MINERALOGY, with references to the Collection of Minerals in the British Museum. To which is added, a short Introduction to the Study of Fossils. 12mo. With Engravings. By M. A. VENNING. Price 4s. 6d. half bound.

An INTRODUCTION to BOTANY, in a Series of Familiar Letters. With illustrative Engravings. By PRISCILLA WAKEFIELD. The Tenth Edition, just published. To which is added, An APPENDIX, containing a short Introduction to the Natural Arrangement of Plants. Boards. Price 4s. 6d.; or, with Plates coloured, 8s.

MORNING CONVERSATIONS of a Governess and her Pupils; or an Attempt to simplify the Linnæan System of Zoology. 18mo. half bound. Price 2s. 6d.

SKETCHES from NATURE; or, Hints to Juvenile Naturalists. By the Author of the "Young Emigrants," &c. &c. 18mo. 2s. 6d. half bound.

The FISHERMAN'S HUT, and other Tales, for Children. 18mo. 2s. half bound.

The ORPHAN'S CHOICE. A Tale. By ELIZA * * * * * Author of "The Cousins," "The Way of Peace," &c. 18mo. Price 2s.

The YOUNG BARONET; or, the Broken Leg. 18mo. half bound. Price 2s.

A NEW DESCRIPTION of the EARTH; considered chiefly as a Residence for Man. By JEFFERYS TAYLOR, Author of "The Little Historians," "Esop in Rhyme," "The Forest," &c. Price

LITTLE ANECDOTES for LITTLE PEOPLE. A New Edition. 18mo. Price 1s.

SELECT FEMALE BIOGRAPHY; comprising Memoirs of eminent British Ladies. 12mo. boards. Price 7s.

EDWIN; or, the Motherless Boy. By BOURNE HALL DRAPER. 12mo. half bound. Price 5s. With Plates.

The CLASS-BOOK of CHRISTIAN MORALS. By BOURNE HALL DRAPER. 12mo. boards. Price 3s. 6d.

The WILD GARLAND; or, Prose and Poetry connected with English Wild Flowers: intended as an Embellishment to the Study of Botany. 12mo. half bound. With Plates, plain, price 3s. 6d. or coloured, price 5s.

A SKETCH of the LIFE of LINNÆUS. By the same Author. 18mo. half bound. Price 2s.

MIDSUMMER HOLIDAYS at Briar's Hall; or, Summer Mornings Improved. 12mo. half bound. Price 6s. With Plates.

HENRY and EDWARD; or, Familiar Conversations on the Elements of Science. 2 vols. 18mo. half bound. Price 5s.

RECOLLECTIONS of a BLUE-COAT BOY; or, a View of Christ's Hospital. 18mo. half bound. Price 2s. 6d.

REAL STORIES, taken from the Narratives of Various Travellers. 18mo. half bound. Price 2s. 6d.

FIRE-SIDE STORIES; or, Recollections of my School-fellows. 12mo. half bound. Price 5s. With Plates.

The PICTURE GALLERY EXPLORED. By the same Author. 12mo. half bound. Price 6s. With Plates.

PROVIDENTIAL CARE: a Tale, founded on Fact. By E. SANDHAM, Author of "The Twin Sisters," &c. Price 2s. half bound.

Published by Harvey and Darton.

ORIGINAL POEMS, for Infant Minds, by several young Persons. Two vols. Price 3s. half bound.

"We have seldom seen a book, the title of which has so well corresponded with its contents. The poetry is very superior to what is usually found in books of this kind, and the moral tendency of the whole is excellent."—*Imperial Review.*

RHYMES for the NURSERY, by the Authors of Original Poems. Price 1s. 6d. half bound.

"We have not room for extracts, or could convince our readers that the writers of these 'Rhymes' have better claims to title of poets, than many who arrogate to themselves that high appellation."—*Critical Review.*

RURAL SCENES; or, a Peep into the Country, for good Children; illustrated by nearly One Hundred Copper-plates, with appropriate Descriptions in Prose and Verse. By the Authors of Original Poems. Price 2s. 6d. neatly half bound.

CITY SCENES; or, a Peep into London, for good Children. By the Authors of Rural Scenes. With One Hundred Copper-plates. Price 3s. 6d. neatly half bound.

LIMED TWIGS, to catch young Birds. By one of the Authors of Original Poems. Price 2s. half bound.

The YOUNG EMIGRANTS; or, Pictures of Canada, calculated to amuse and instruct the Minds of Youth. 18mo. Price 2s. half bound.

ORDER and DISORDER: a Tale, recommended to the perusal of all little Girls who wish to be neat, notable, and industrious. 18mo. Price 2s. half bound.

The DECOY; or, an agreeable Method of teaching Children the elementary parts of English Grammar, by Conversations and Familiar Examples. Price 1s.

The HISTORY of GREECE, in easy Lessons, adapted for Children from six to ten years of age. By Eliza A. Hendry. Price 2s. half bound.

LIVES of DISTINGUISHED FOREIGNERS, celebrated in Childhood for premature Attainments. Translated from the French by E. Arrowsmith. With four beautiful Engravings. 18mo. Price 2s. half bound.