VII.—OLD TYNE BRIDGE AND ITS STORY.

BY JAMES CLEPHAN.

[Read on November 24th, 1886.]

SINCE the appearance in the Transactions^{*} of the brief paper on "Old Tyne Bridge and its 'Cellars,'" I have given it a marginal note, which may as well pass into print ; and should my pen not wander beyond it to an unreasonable length, the transgression may be more than pardoned, now that a restoration of the quaint Plantagenet structure has been projected, with a change of site to the Jubilee Exhibition of 1887 on Newcastle Moor.

At the time of the destructive November inundation, by which Old Tyne Bridge was wrecked in 1771, with all the bridges of the Tyne, save one, there were upwards of twenty tenements south of the Blue Stone (the St. Cuthbert's stone of a former day), eleven on the east side, ten on the west; the Bishop of Durham's third of the thoroughfare being more densely peopled than the two-thirds of the Corporation of Newcastle. John Hilbert's picture, which appropriately illustrates the instructive paper[†] of Dr. Bruce, "The Three Bridges over the Tyne at Newcastle," shows how clustered was the southern extremity of the viaduct; and the statue of the "Merry Monarch," pointing down from its niche in the Magazine Gate, to the extract from the small folio of the Rev. Henry Bourne, published in 1736, courteously admonishes us that the print must have been engraved for Cuthbert Fenwick's mayoralty of 1739, not for his accession to the chair in 1727. In a note on the engraving, made by Sykes in his Local Records, he remarks :--- "The arches of this bridge were some of them Gothic, and others scheme arches. They had no regular decrease from the middle to the ends, and the passage over them was very narrow, and crowded with houses, built of wood," the curling smoke of whose chimneys is not overlooked by the artist.

When the bridge gave way in 1771, there went with it, at the Gateshead end, considerable revenue. John Clarke, mercer, one of

* Arch. Ael., Vol. IX., pp. 237-240. † Arch. Ael., Vol. X., pp. 1-11

the lessees, carrying on business next door to Dr. Oliphant, on the west side, held premises worth £22 a year; three, of whom Oliphant's was one, £20; until, dwindling down, £6 is reached. In whole, £286, equally divided between the two sides of the way; the supposed value of the property altogether being £3,803.

The Oliphants, when unhoused by the flood, found temporary refuge in Church Chare, Gateshead, (the narrow thoroughfare preceding the Church Street of the present day); being indebted for the hospitable arrangement, we may safely assume, to the good offices of the benevolent and energetic Rector, the Rev. Andrew Wood, M.A., one of the heroes and benefactors of the hour, whose death by fever, in the month of March thereafter, was ascribed to his ceaseless labours of love and duty. His mural monument in the church, offspring of the esteem, affection, and gratitude of the people of Gateshead, informs us that in the 57th year of his age he was "interred amidst the tears of his parishioners"—a touching tribute to his worth.

In the year 1772, the Oliphant family removed from the scene of their twofold trials and sorrows to Scotland. Their old friend and neighbour, John Greene, a leading inhabitant of Gateshead, appeared in the Mayor's Chamber of Newcastle, in the month of October, "for and on behalf of Mr. James Oliphant in Scotland, owner of a house at the south end of the old stone bridge," and stated that "the present slanting stays were not sufficient to support it," and it was consequently "in danger of falling into the river;" whereupon Mr. John Stephenson, at that time employed in the construction of a temporary viaduct across the Tyne, was instructed to apply additional props if necessary.

The river, at Newcastle and Gateshead, was now bridgeless; the crossing roadway had, in the eighteenth century, perished by water, as in the meridian of the thirteenth it had been destroyed by fire; and once again it must be restored. Let us go back to bygone times, and fulfil, so far as space may permit, the promise of following the fortunes of Old Tyne Bridge; and, in writing the present paper, I must draw, to some extent, upon the columns of my former self, when dealing with the subject for the readers of the *Newcastle Chronicle*. The historical curate of All Saints' is helpful. "Wasteful conflagrations," says he, "had in 1248 reduced cities to ashes in many countries;" and "the towne of Newcastle-upon-Tine, for the most part, with the

bridge, was burned with an unquenchable fire;" after which illfortune, the Burgesses, who had charge of two-thirds, and the Bishop, who owned the other, made it their endeavour to raise up a bridge of stone. The Bishop of Durham sent out indulgences, and other Bishops were induced by the Burgesses to follow his example, that all who could lend a hand, in money or in labour, if not in both, might join in the erection; and by this means the necessary aid was obtained. "The Archdeacon of Northumberland," states our local historian, "wrote to the clergy of his archdeaconry, telling them their venerable Father, the Lord Bishop of Durham, by his letters patent, had commanded them, without any let or delay, to go about the affair of indulgences, and that they were to prefer the episcopal indulgences to others; and what arose from them was to be given to the Master of the Bridge, who was then Laurentius, for the use of the bridge. Its national importance was recognised throughout the kingdom. Itsrestoration was of much more than local moment. The inability of the town, suffering as were the inhabitants from the flames which had consumed the viaduct, to supply its place unaided, was everywhere acknowledged; and contributions for carrying on the work flowed in from all quarters. The maintenance, indeed, of Tyne Bridge, had long been considered a more than municipal duty. The Archbishop of York granted an indulgence of thirty days, in 1257, to all benefactors So also, in 1277, the Bishop of Rochester. The of the bridge. Bishop of Caithness in Scotland, and of Waterford in Ireland, were assistant in the work ; and many were the laymen who contributed to its execution. The new bridge stood upon twelve bold arches; but now (in 1731) there are only nine, the rest being turned into cellaring at the building of the keys. It is a pretty street, beset with houses on each side for a great part of it. In the entrance from the North stands the chapel of St. Thomas the Martyr, sometime Archbishop of Canterbury, so called because it was dedicated to him. Who the founder of it was, I have never been able to learn, nor the time of its building; but it must have been after 1171, the year when the martyr suffered; and it must have been before the year 1248, because then it was in being."

The Burgesses had evidently a sore struggle to keep up the new bridge when they had got it. If it was more useful than the white elephant of the story, it was also more costly. Its maintenance was a heavy burden. The townspeople had continually to be casting about them for casual relief on behalf of their thoroughfare across the Tyne. It was largely dependent upon chance supplies. In 1362, when it was in a ruinous condition, Edward the Third was granting a ten years' toll for repairs; yet in 1370 it was still ricketty; and, in 1394, there was a charge on the Customs for its maintenance. An annual payment of 10s. from a tenement in the Side, occupied by Edward Surtees, a bowyer, occurs for the benefit of the bridge in 1517. The incorporated companies rendered aid from time to time. Fullers and Dyers, when they fined a brother for employing a Scot or taking an apprentice from beyond the Borders, passed over the proceeds to Old Tyne In 1577, the local authorities were besieging Secretary Wal-Bridge. singham for his influence in recovering a lost annuity of £40, granted by Richard the Third out of the custom-house of the port, "towards the maintenance of the great bridge and walls, at present in great Richard had marked their condition in 1482, when he passed ruin." through Newcastle as Duke of Gloucester, marching at the head of an army against the Scots; and Sir Francis Walsingham, Minister of Queen Elizabeth, was entreated to consider that the renewal of this substantial aid would tend to great "public commodity," in the maintenance of "the bridge and walls of this, Her Grace's town, standing The Lord President of the towards the frontiers of Scotland." Council of the North, the Earl of Huntingdon, a not unfrequent visitor in Newcastle, backed the suit of the Corporation. He bore witness, in a letter written from York to the Privy Council, that the Mayor and Aldermen, ever since his coming into the district, had been at great charges in respect of the bridge, which could neither be brought into repair, nor maintained, without continued cost; "and you know," said he, "how meet it is that the walls and bridges of that town should be always well maintained."

It was a bridge, however, evidently not easy to maintain. It was always getting out of repair in one place when cobbled in another. The annuity bestowed upon it by the last of the Plantagenets, and allowed to lapse, was greatly needed; but we do not learn that it was regained under the last of the Tudors. Charles the First granted it a supply of trees out of Chopwell Woods, and his boon may serve as some clue to the construction and condition of the venerable viaduct. By hook or by crook it was kept standing most wonderfully, and prolonged in serviceable existence generations after it was feared that it would fall. "Originally very ill-built, and in general of too small stones, and not of the best kind," was the report* of Smeaton on the near eve of the completion of its span of life. The builder of the Eddystone Lighthouse "found it in a general state of disrepair;" Tyne Bridge being at that time not of any one age, but of various ages—altered, mended, patched, overloaded, and propped through the whole course of its servitude of centuries; but the distinguished engineer shook his head when asked how much longer he thought it might endure; for "creaking carts go long on the road."

"The Case of Mr. James Oliphant, Surgeon," which in 1768 was sold by Benjamin Fleming, "Bookseller and Stationer under the Magazine Gate on the Bridge," gives a description of one of the houses that stood at its southernmost end, as quoted in the ninth[°] volume of the Transactions,[†] from attic to "cellar," to which the curious reader may turn back as an instructive study.

A divided estate, Old Tyne Bridge had depended for its stewardship on two proprietors-the Bishop of Durham and the Corporation of Newcastle-sometimes at peace, sometimes at loggerheads. In 1383, the then Chief Magistrate, William Bishopdale, with his colleagues and the commonalty, began to build a tower at the southern end, and displaced and carried away the boundary stones, one on each side. A charter of King John was the authority under which they claimed to act; but the courts of law, to which the Bishop. the Count Palatine, appealed, gave judgment against the Corporation. Then, in 1416, came the Sheriffs of Durham and Westmorland, and took possession for Cardinal Langley, Bishop of Durham. The stones were replaced : his lordship had restitution of the disputed bulwark, "with all his chivalry." When Bishopdale was Mayor, he had leave from the Crown, for himself and successors, to be preceded by an uplifted sword. Yet the Corporation could not, for all that, have their own way in the world, even though, with a sword in their front, they had a charter of King John at their back. A wondrous man in tradition is King John; for has it not been averred, among other things, that he built Tyne Bridge !

* See Smeaton's Report. at p. 148.

+ Arch. Acl., p. 238.

Times change, and we with them. Durham had a bishop, after Langley, who sailed on quite a different tack. He was for throwing off the burden of the bridge, and casting it upon the county. But the attempt to get rid of the charge, made in 1582, was a failure. The Court of Exchequer ruled against it.

When, north and south of St. Cuthbert's boundary line, Church and Corporation were at issue, a solitary recluse was looking out upon the quarrel from his peaceable hermitage on the bridge. As the tide of life rolled past him, smooth or ruffled on its way, the priest in his cell could see the "stir of the great Babel," and quietly enjoy the spectacle, in whatever mood the current flowed. On the death of Roger Thornton, in 1429, the hermit was one of the priests remembered in the princely merchant's will. He was to sing psalms for the soul of the deceased, and have his bequest among the others. The roadside priest was still there in 1562, when the Mayor and his Brethren were expending half-a-crown over the clock of "the chappell of the bridge," near the central tower ; and in 1643, when the clock of the State was out of gear, and a crown could not put it to rights, the secluded anchorite was peeping as before from his "loophole of retreat." His position between the combatants must have been critical in the siege of 1644; and curiosity looks-but looks in vainover the leaves of local story, to learn what became of him in the fiery storm, when Newcastle was won from the King by the Covenanters.

St. Mary's Church, looking down upon Tyne Bridge, had its anchoress when Newcastle had an anchorite. That munificent prelate, Bishop de Bury, lover of literature and learning, granted a license in 1340 for the selection of a site in the churchyard of Gateshead on which to build a habitation for an anchoress, the "Anchorage School" perpetuating the memory of the foundation to the present century. Life is strange. We wonder over its contradictions and inconsistencies, or, at least, what seem to be such. Mayor, Aldermen, and Burgesses were having massive walls built round about them, and perplexed as to their maintenance, while the good lady on the opposite bank of the Tyne was calmly seated in her lofty nook, unsheltered by the sword. Singular was the aspect of the structure she beheld below! Watching the procession of the passengers, it was as though a street had been swung across the river, its supporting pillars filling up a full third of the way. The Great Tower, serving the purpose of a prison, bestrode the road about midway. Leland, who gazed upon it with admiration in the reign of Henry the Eighth, tells us of a "gate at the bridge ende" on the north, and a "stronge wardyd gate at Geteshed" on the south. There were ten arches beneath, and a strong "warde and towre" above. On both sides of the river the marvellous edifice was a source of local pride. Few were the bridges of the kind which England could show to travellers. "Impartial persons allowed it to be the third in order of English bridges before that at Westminster was erected, viz., London, Rochester, and Newcastle." The author of *Gephyrologia*, writing in 1751, "did not remember any other bridge in England, except those of Bristol and Newcastle, and that of London, which was thus converted into a street."

As Margaret Tudor, daughter of King Henry the Seventh, passed into Newcastle in the summer of 1502, moving northward to her Scottish bridal, she was borne along this picturesque avenue in great pomp. "At the bryge end, upon the gatt, war many children, revested of surpeliz, syngyng mellodiously hympnes, and playing on instruments of many partes;" a scene that will, of course, be melodiously repeated in the orchestra of the revived bridge on the Moor, when Newcastle commemorates the Jubilee of Queen Victoria.

James the Sixth of Scotland, coming to Newcastle a century after his Tudor ancestress, admired "the manner and beautie of the bridge and key;" and "before he came to Gateside," on his southward progress, "he made Mr. Robert Dudley, Mayor of Newcastle, a knight," in acknowledgment of his hospitable attentions. His grandson, Charles the Second, had his memory honoured by the erection of a statue in a Roman habit, with a complimentary legend, in front of the Magazine Gate on the bridge. Narrowly it escaped the fortunes of the fall in November, 1771. In the spring of that year the gate had been taken down to give the town a more commodious entrance; and the statue had a place assigned to it on the Sandhill, which since that period has more than once been changed, the world being mutable.

Old Tyne Bridge had been reared in the reign of Henry the Third, builder of the Black Gate, now doing duty as a museum for the Society of Antiquaries. George the Third succeeded to the throne five cen-

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turies afterwards; and by a succession of spans the durable viaduct was still making its way over the river, surviving the storms and - shocks of full one-half of a thousand years, the bumping of keels, the assaults of war, the negligent inattentions of peace, the fears and forebodings of the community whom it had so long contrived to serve. Let us see how it stood when the time of its departure was at hand. Many were its too contracted arches, its too massive piers; aged and frail; picturesque to perfection for the artist; a butt for the wind and the rain above, and the restless waves below. The seventh arch from Newcastle, and fourth from Gateshead, was the Keelmen's, placed in mid-stream, and bearing the name of a stalwart race of men, famous in story, but now almost altogether passed away. The Great Arch was the sixth from Newcastle, with the boundary pier of the Bishop and Corporation between it and the Keelmen's. The White Arch was the fifth. There was also a Drawbridge Arch, the second from Gateshead, whose name conveys its purpose. At the Drawbridge, as also at the Central Tower, there had anciently been, conjecturally, a portcullis, for further defence. In the summer of the year, 1770, Bishop Trevor was repairing with stone the Drawbridge Arch. Tyne Bridge was closed, and there were ferries from the east end of Hillgate and west end of Pipewellgate. Smeaton, examining the viaduct before it fell, ascertained that where the drawbridge had been, there was a floor of timber, covered with earth and pavement, the work "roughly executed," and "having all the appearance of a job done in a hurry;" done in some emergency which I leave to any or everybody's imagination. Charles Hutton, the famous mathematician, writing calmly the epitaph of the bridge in 1772, says, "it had stood five hundred years, and might have stood much longer, if the lowness of the arches, and too great thickness of the piers, had not so much contracted the passage of the water." Its life-work had been done long and well.

In the removal of the wreck, to make way for its successor, a stone coffin was found in the pier on which the Great Tower had stood, 5 feet below the pavement—another tax on the imagination; and one more offers itself in the form of a mystic scroll, inscribed with characters on paper or parchment that vanished into dust, "a moment seen, then gone for ever," curiosity whetted and disappointed. Perchance, however, the parchment or paper, like Canning's knifegrinder, had "no story to tell."

Among the Imprints and Reprints of Richardson there are tracts which have stories many. One of them, abounding with extracts from the Corporate Accounts, will throw some little light on Old Tyne Bridge. We have here, for example, an item apprising us that in the month of April, 1592, "the towne storehouse" was "on the bridge," and assisting in blocking up the way. "Robert Hedleie, wrighte," has six days' work, at tenpence a day, in the corporate repository, and is "makeinge railes to hing armor of." In the summer of the same year, William Dickens has 40s. from the town chamberlains, "in parte of paymente of £12 for guilting the Quene's armes, and the towne's, att the bridge end." Edward Waterson, seminary priest, is put to death in Newcastle (priests made by Roman authority being forbidden to come into England under penalty of forfeiture of life); and in the month of January, 1593 or 4, there is "paide to Sandrs. Cheisman's man, for putting the pinicle for hinging the preist's head of the bridge, 6s.' With all the coolness of a counting house such records are made; a succession of business entries, disbursements for "hinging" of armour, repairs of clock, gilding of arms, exhibition in terrorem. of the head of a priest done to death under the law !--illustrations of the life of Tyne Bridge from day to day. Strangers come and go, admiring the Great Tower; and our local annals have to tell that it was not only a prison but a malt-house! Harry Wallis, a master shipwright, is sent to the frowning keep, for the too free use of an abusive tongue, and finds a quantity of malt lying in the chamber where he is lodged, overlooking the river. "Merrily reflecting upon himself," he takes a shovel, "and throws it all into the water out at the window," improvising a verse that was to live in the story of Old Tyne Bridge :----

> O base mault, Thou didst the fault, And into Tyne thou shalt.

Into Tyne the bridge itself, with towers and gates, houses and shops, was to follow; but the time was not yet. Trade and traffic ran on as before. Booksellers continued to flourish over the piers and arches, one of whom was the countryman and friend of Allan Ramsay; and the author of *The Gentle Shepherd* sends him a letter, which finds its way to the renowned viaduct from the Edinburgh bookshop, addressed— To Marton Bryson on Tyne Brigg

To Marton Bryson on Tyne Brigg, An upright, downright, honest Whigg

It was a Bryson who printed in Edinburgh, quickly after the siege and surrender of Newcastle in 1644, Lithgow's triumphant account of the success of the Scottish arms; and Marton Bryson was possibly a kinsman. His site on Tyne Bridge is disclosed to us, incidentally, by a newspaper notice of a fire that broke out in premises by the riverside, beneath the bookseller's home and shop above, on the western side, and towards the northern end. One of his apprentices, William Charnley, son of a haberdasher in Penrith, became his partner and successor; and the flood found Charnley at the receipt of custom, with his trumpet at his ear, in 1771. The "pretty street, beset with houses on each side," had received many a warning from the river 'since the fatal fire of 1248. Its populous houses and marts had often been threatened with overthrow by raging waters. But familiarity breeds proverbial contempt. Some few years before the fall, in a December storm of rain, the gathering flood stood "full three feet deep between the town-wall and the houses on the Quayside." More peremptory still was the notice to quit that came in the year 1771, and proved irresistible. In the month of November was the heaviest and by far the most protracted storm of rain known to memory or The river rose twelve feet above the ordinary mark of high tradition. tide : "three feet six inches higher at the bridge" than records ran. On the Quayside there was six feet more water than a few years before. The week ending Saturday, November 16, had been one of incessant rain over the whole watershed of the Tyne. The bridge had its arches filled to the brim. It stood with its houses in the flood as though it were an island. The Close and the Sandhill were submerged in common with the Quayside. Boats were plying where carriages had run. A shoemaker on the bridge (Peter Weatherley), roused in the early morning of a new week by the rushing torrent, opened his casement, and had an indistinct vision of two of his neighbours, Mr. and Mrs. Fiddes, who dwelt towards the north end, passing along the bridge in the direction of Gateshead, accompanied by their two children and a maid. He closed his window and was about to return to his bed, when suddenly the arch adjoining his house on the Newcastle side surged down into the raging depths, and the roadway was broken by a yawning gulf. The family whom he had seen passing had escaped to Gateshead in safety. But the servant girl, remembering a bundle

she had left behind, prayed her master to go back with her for its recovery, and he consented. His wife remained with her children, watching their retreating steps; and as she followed them with her eyes through the morning light, the arch went down, and master and maid were hid from her view. The shoemaker, who had witnessed the safe retreat of the family, was now attempting to make his own. The northern way he knew to be broken, but he expected to gain the southern shore. Soon, however, he was on the brink of the chasm which had proved fatal to Mr. Fiddes and his companion, Ann Tinkler. Before and behind him there was no passage left. He and his household, his wife, their two children, and a servant, were insulated on an area of not more than six feet square, which threatened to sink from under them at any moment. So rude and unruly were the waves, that no boat could put off for their rescue and hope to But a bricklayer in Gateshead, George Woodward, whose name live. has been preserved for us by Sykes, conceived and executed a measure for their deliverance. A range of shops, then holding together on the east side of the bridge, supported only by timber, lay from pier to pier, extending from Gateshead to the place where Weatherley and his little flock had been standing from about four o'clock to ten. The bricklayer saw in these tremulous structures his opportunity, and was prepared to peril life that lives might be saved. He broke a large hole through the side of every shop, all the way to the arch where the family stood, and through these openings he brought the whole of the household into Gateshead; one of those deeds of heroism which dignify humanity, and command the admiration of mankind.

The waste of waters had attained its greatest elevation in the morning of November 17, prior to the deliverance of the Weatherleys from impending death. The surface of the flood stood full twelve feet above the spring-tide level : six feet higher than was reached before. Buildings were everywhere distressingly invaded on both sides of the river, and extreme loss and misery inflicted on the inhabitants of the bridge. The Sandhill was a lake over which boats were floating. Ships were driven upon the Quayside, from which the town-wall had now been removed, and converted into a church. Appalling was the spectacle that afflicted the eye after break of day on Sunday, the shores no longer connected by the familiar bridge. Hundreds of the spectators had been bereft of their homes : the hearths of not a few were darkened by death. To Mr. Fiddes and his maid, who dwelt on the bridge, Sykes adds Christopher Byerley (hardwareman) and his son, as perishing by the falling arches; together with an apprentice of John James, cheesemonger. Tradespeople of great variety were involved in the wreck : mercer and milliner, flax-merchant and bookseller. "The house of Mr. Patten, the mercer, was carried wholly away as far as Jarrow Slake, nothing left in it but a dog and cat, both alive." No wonder that in All Saints' Church, the annual school sermon had scant audience. The Mayor, who was one of the Borough Members, was among the few persons present. This was Sir Walter Blackett, the merchant prince whose memory has come down to us as that of one of the most munificent magnates of the Tyne. A cheerful and liberal giver on other occasions, it was observed with surprise that he now permitted the plate to pass without a contribution. At the close, however, of the service, he went into the vestry, and inquired of the churchwardens how much they had got, and what was the amount they usually received ? Then, having had his answer, he paid them the difference. It was an act of generosity characteristic of "The King of Newcastle;" and in the urgency of the hour, the spirit of Sir Walter, and of Andrew Wood and George Woodward, found practical expression along the whole course of the Tyne. If there was lamentation and woe, there was sympathy and succour, and also resolute action to restore the broken roadway over the river.

Divided counsels and conflicting interests stood in the way for a while in Newcastle and Gateshead. With a clear course there were castles in the air. Two high-level bridges captivated sanguine fancies; one starting from the Castle Garth; the other soaring over the Sandhill from the Head of the Side, a plan of which I have seen. But the time was not yet. The populous lower levels were predominant. The Corporation of Newcastle, and the Boroughholders, Freemen, Freeholders, and Inhabitants of Gateshead, acting through a Committee, assisted by the facile pen of the Rector, were the chief forces to be brought into harmony. The former proposed a viaduct starting from the Javel Groop in the Close : the latter stood by the Roman site. Their "propositions, layed before the Corporation," they enclosed to Bishop Egerton, "first premising that their great

object was to have the new bridge built on such a site as it might not be in art to design any other avenue thereunto more commodious than the line of street of Gateshead." The Bishop intimated, moreover, that if the bridge were built on the old site he would be at one-third of the expense; but if it went westward, the Corporation would emancipate him from his liabilities, and he would not pay a penny. This was enough. The Boroughholders and their backers won. The Roman pass was saved. Old Type Bridge rose from its ashes on the old spot, a stone viaduct of nine arches; which Neptune speared long before five hundred years were gone. Trade and population had vastly increased above bridge and below; and in the summer of 1876 came the light and graceful platform of the Hydraulic Swing, with its convenient opening door, bringing the upper and lower reaches of the river into ready communication. Old Tyne Bridge, in its newest form, has the companionship of the much admired and much used Redheugh Bridge, and also of one of the two "High Levels" projected immediately on the catastrophe of 1771. Edward Hutchinson, master mason, who was of the family of our departed friend, George Bouchier Richardson, was enthusiastic and eloquent in his advocacy of a lofty viaduct, on or about the line of Robert Stephenson's celebrated High Level Bridge of the present century, "contrived a double debt to pay." With an "elegant plan," Hutchinson addressed the Mayor, Aldermen, and Council, unfolding his project. "As we build for posterity," said he, "let us do it in such a manner that remote ages may approve the justice and dignity of the plan." The Mayor and his Brethren had to deal, however, not with posterity, but with the Novocastrians and Gatesiders of the passing day; and on the low level, and the ancient site, rose up the new bridge.

The Story of Old Tyne Bridge I have but hinted at, not told. Requiring a volume, it is not to be compressed into the compass of a paper; and other pens than mine may supply the deficiencies, and vary the interest of the tale, for the recreation and instruction of the members, their families and friends. The vanished viaduct, to which we look back with loving memory, had existed from "remotest ages." But time and tide wait neither for man nor bridges. The hour comes; the clock strikes; and they fall.

VIIa:-OLD TYNE BRIDGE.

THE following *Report*, referred to in Mr. Clephan's account of the Old Bridge (pp. 135-142), has been printed from the original document now in the possession of a member of the Society :--

REPORT OF JOHN SMEATON, ENGINEER, CONCERNING THE STATE OF THAT PART OF TYNE BRIDGE BETWIXT NEWCASTLE AND GATES-HEAD, WHICH IS IN THE COUNTY OF DURHAM.

Having carefully inspected the State of the South part of Tyne Bridge, the 16th of September last, at low water, I found it in a general State of disrepair; but as it has been originally ill built, I look upon it as impossible after standing so many years, to render it perfectly sound, unless the whole was new built which is not the present proposition; yet by occasional Repairs, seasonably applied, it may last many Years. I shall therefore take the arches in order and confine myself to the pointing out of such things as more immediately call for assistance.

The 1st arch, beginning from the South Side, is in a great measure blocked up by Cellars, for convenience of the houses above; & has no Current of Water through it when the Water is below the Sturlings, or Jetties, as they are called, which surround all the Piers, in the manner of London Bridge; this Arch seems at present to want no material repair.

The 2nd arch has a passage between the Jetties at Low Water. The aislering of the Piers, on both sides this arch, want repairs many of them being loose, & some of them dropped out; the aislering of the North Side appears worse than it really is, having been built originally bulging; at least so it seems to me.

The whole, or greatest part, of the arches of this Bridge have been lined with Ribs, as was customary formerly, with a view to strengthen them; but it so happens that a great many of those Ribs have separated themselves from the arches that they originally were in contact with, and have tumbled down; one of the ribs now remaining in this arch vizt.; that on the upstream or west side of the arch, is so far separated from the arch, & is in such imminent danger of falling, that to prevent mischief to any that may be under it, when it happens to fall, it will be proper to take it down. I do not apprehend it anyways necessary to rebuild it; because I cannot suppose that it has ever been of any real use. In the middle of this arch, the stonework is entirely perforated by an area of about 4 yards by 6, & as the Bridge has been so constructed at first, it seems as if this area had once been covered by a Draw Bridge, by way of defence being so placed that if open, the passage over the Bridge as it now is between the

SMEATON'S "REPORT."

Houses, would have been stopped thereby. This area is now floored with Timber covered with Earth, & paved at the Top like the rest of the Bridge; so that when Carriages go over this part of it, the Vibration of the Timber makes it appear to shake. The main Timbers are pretty strong; but the whole has been very roughly executed, & has all the appearance of a Jobb done in a great hurry. It seems also to have had some repairs occasioned by the rotting of the Ends of the great Beams, which have been supported by pieces put under them. Some of the small Wood that is supported by the greater, appears to be decayed; but, while so supported nothing of great consequence can happen. In fact as I don't find the State of this flooring sensibly different from what it was when I viewed it in the year 1765, for that reason, it may be supposed possible to continue for a number of Years to come; but as it is a piece of Work so put together. that one cannot answer for it a failure may happen when it is least expected :. and as the Lives of Men depend upon it, & is in a visible state of decay it appears to me that it ought to be repaired ; & as it is very probable that it may never be wanted again to serve the original Intention while it is a doing I would recommend this area to be arched with Stone; & as the Center may be erected underneath, & everything prepared for turning the arch before anything is disturbed upon the Top, I apprehend everything may be, with ease compleated in three days' Stoppage.

The next arch North has lost all its Ribs, yet shows no Signs of Infirmity except, that as the Penstones are in a double Layer, composing an interiour & an exteriour arch, the former is a little separated from the latter, on the downstream side on the South Haunch. Some Repairs are wanted in the Setting of the Jetties of this arch, as also more or less in all the rest.

The 4th arch from the South Side, or second from the draw Bridge arch, is called the Keelmans Arch; it has originally had 5 Ribs underneath it, of which there is only one remaining but it shews no loss by the want of them. The upstream Shoulder of the Pier on the South Side of this arch wants repairs, & together with the rest, a number of small articles which it would be useless as well as tedious to mention.

As the whole of the Repair is a kind of Jobbing Work, there is no ground upon which to form an Estimate of the Expence for when part of an old Edifice is pulled down in order to be repaired, it often discovers something unforeseen; of which a Repair is equally necessary; for this Reason (except the arching of the draw Bridge Area) it cannot well be done by Contract; because a Contractor will not do more than originally appeared, & thereby the Sore left unbottomed; & if done by day's Work, the Expence will greatly depend upon the honesty & Address of the Workman; but I should imagine the whole, stone Arching in the draw Bridge included, may be done as well as the general state of the Bridge will admit of, for £150, or at most £200.

Ansthorpe, 18th Oct., 1769.

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