

Practical Suggestions
On The
General Improvement
Of The
Navigation of the Shannon
Between Limerick and the Atlantic ;
and more particularly of the part of it named by Pilots
THE NARROWS
By Thomas Steele, Esq.

Ennis, County Clare, Dec, 1827

SIR,

ON the evening When I took my seat as an Associate Member of the Institution of Civil Engineers, I signed in your presence a Declaration, that I should always, to the utmost of my power, endeavour to promote the objects for which the Society had been founded ; and I now, without at all identifying you with my Politics, beg permission to dedicate to you the following Pages ; that, at the same time when I make an humble effort to fulfil my Pledge to the Institution, I may, as an Irishman, have the gratification of publicly expressing my sense of the benefit you have conferred on my Country, by increasing, to the extent that you have increased it, the rapidity of communication between Ireland and England.

In the progress of your Work, Sir, for drawing the two Countries by so many hours nearer to each, other than they were before, you have not only formed one of the most magnificent Roads in the world over the mountains of Wales, but you have suspended in the mid-way air—not over a river, but over a portion of the mighty deep itself— a Monument to your Genius, harmonizing with the objects around, beneath, and on high for, like the ridge of the Cambrian mountains, the ocean-tide, and the firmament of heaven

“ This new wonderous Pontallice unhoped” [1]

the Bridge over the billows of the Menai is sublime.

I have the Honour to be,

Sir,

With great respect, '

Your very, faithful Servant,

THOMAS STEELE

With respect to the form in which I have written the Remarks in the Second Part, I wish to say a few words.

One still and solemn evening last autumn, a little after sunset, I was in a boat on the Upper Shannon, returning to Limerick. I had passed that branch of it called the Abbey River, and was observing a part of the Island, the ancient Bridge, the towers of the Castle, dark almost to blackness by the incessant smoke of several forges which are under them—the gloomy trees in St. Munchin’s Church-yard, hanging over the water, the Gothic turrets of St. Mary’s Cathedral, and the City itself combining in such a manner by the progress of the boat, as to form what Artists call technically *a picture*. My mind being a good deal occupied at the time with the subject of the Navigation of the Shannon, I called to memory, while I was gazing on the prospect before me, the story of the loss of the Rose of Chester. . .

The Narrows.

LIMERICK PILOT. “ Often they make us tremble in our skin, going by there by night. Sir.”

FISHERMAN. “ Ah ! surely.”

THE WRITER. “ Why ?”

PILOT. “ THE CHANNEL IS SO NARROW, AND SUCH A RAPID TIDE, SIR.”

(Extract from the writer’s Notes, of Conversations with the Pilots and fishermen on the Shannon) .

I WOULD not hazard the attempt of writing upon a practical subject, unless I felt a thorough conviction that my acquaintance with it was purely practical, and without any alloy or intermixture of theorizing or conjecture; and I venture to hope that; in the following observations, there will be found the impress of careful examination. That the internal evidence of this might be as strong as possible, I have in all cases studiously preserved the very forms of expression made use of by the Pilots and Fishermen, in my several excursions, while actually upon the water, or the islands, or the rocks of the river ; and it is not to be overlooked, that their perceptions and recollections must be at such times much more vivid than under any other circumstances, while in the actual contemplation of the objects about which I was inquiring: and furthermore, none of them would attempt to talk at random for a moment, as there were so many others always present to check or correct them.

I seldom took with me less than eight or nine Pilots and Fishermen, that I might not only have answers to my direct inquiries, but that I might have the advantage of their *inter-knowledge* ; in listening to their unrestrained observations and reminiscences of circumstances which had occurred upon the river.

To carry into execution such a plan as I propose, obtaining a multitudinous collection of facts, is the very first thing necessary ; and this can only be done by careful, patient, repeated, and reiterated inquiry of persons thoroughly familiarized with the Navigation to be improved.

What the author of the Essay on the Human Understanding, and of that on the Conduct of the Understanding, says, in the latter, of the intellectual world, is equally true of the physical—that, “ although there be a intellectual world of infinite beauty outside us, it must not be taken altogether, but must be brought home piecemeal ;” and this is partly true in all physical investigations—we must get our facts one by one, and examine them one by one, with rigorous minuteness.

Men may revel as much as they choose in physical theories, but unless these theories be founded upon a sufficient number of facts in the first instance, and be afterwards confirmed and stabilitated by fact—viz. the test of experimental proof—they are but unreal mockery,

phantasms of imagination, images distorted and wavering, flung by a magic lantern upon a column of smoke.

I recollect that, upon one of the evenings of the meeting of the Institution, I was sitting near a Gentleman (Mr. Turrell), looking over some drawings, and in the course of conversation, I happened to observe to him my reckless disregard of all theories in natural philosophy, until confirmed by experiment. He replied to me by a sentence which contains more in a few words, than all I have ever heard or read upon the same subject, put together—“ ’Tis very true. Sir ; we say that the Devil has invented Practice to contradict Theory.”

Xenophon tells us of Socrates, that he went to work methodically and systematically, to make his friends *More practical* ; but I am very sure that neither he, the great philosopher of antiquity, nor any of those three philosophers, whose “ gorgeous coming,” like “ the sun’s,” has poured its refulgence upon modern time, ever said or wrote any thing at all comparable to what I have just mentioned—for neither Socrates ; nor Bacon, the author of the *Novum Organum*, and almost of the very system of Induction itself ; nor Locke, who urged and insisted upon its necessity ; nor Newton, who invented Fluxions, and untwined the vortices of Descartes—ever in their lives, I am confident, made use of so good a sentence for overthrowing the sanctuary of vanity and ignorance—*theory, mere theory*—running the plough over the place where it stood, and sowing it with salt—as that short specification of this patent invention of the Devil.

“ Then he must have died of apoplexy, in consequence of the amputation,” said a theorizer.

“ But he did not die,” said the person who had seen the man alive.

“ But then *he ought to have died, Sir !*” vociferated the theorizer ! ! !

I recollected this exquisite contrast as Mr. Turrell spoke ; and I treasured from that moment, as my golden rule—my rule of gold of Ophir of philosophizing—in physic, in physics and metaphysics too—“ THE DEVIL HAS INVENTED PRACTICE TO CONTRADICT THEORY.”

To be the person who should direct the execution ^c a. plan of my own, for the improvement of the Navigation of the Shannon, or at least give an exposition of a methodical and comprehensive plan for its improvement by others, has been an object to which, as an Irishman, I have long felt an impulsion ; and, indeed, during a part of the very time while I was first under water in my own diving-bell [2], I was occupied in forming a crude project, as to the mode by which it could be effected ; however, by reason of long absence from this part of Ireland, I had no opportunity, until lately, of deciding upon the measures by which it might be carried into execution.

Even though Limerick possessed no other interest than that derived from her location, and were not a city almost sanctified by historical associations, the local situation alone is so peculiarly auspicious for inland trade and foreign commerce, that our leaving it as it is, without giving it the full advantage of its geographical position, by improving the Navigation of the magnificent river, reminds me very forcibly of certain objects described by Clarence, as seen in his dream, at the bottom of the sea — (I naturally, as a diver, take sub-aquatic illustrations)—“ unvalued jewels,” in skulls without eyes, and without brains. But, by giving Limerick the full advantage of that geographical position, of which she is at present but half in possession, she will most probably become in time a great and mighty city—one of the first upon the globe, an emporium, and the point, not of commercial alone, but of political contact between Europe and America—the old world and the new.

Spenser, in the *Faerie Queene*, has described the Shannon as

“ The spacious Shenan, spreadmg like a sea ;”

and he thus describes Ireland, while he “ *much pities that ‘ sweet land’ that, above all other countreyes that he knew, it should bee thus miserably tossed and turmoyled with these variable stormes of affliction, wherein she hath thus wretchedly beene wracked. And sure it is yet a most beautifull and sweet countrey as any is under heaven, being stored throughout with many goodly rivers, replenished with all sorts of fish most abundantly ; sprinkled with many very sweet ilands and goodly lakes, like little inland seas, that will carry even shippes upon their waters ; odorned with goodly woods, even fit for building of houses and ships, so commodiously, as that if some princes in the world had them, they would soone hope to be lords of all the seas, and, ere long, of all the world : also full of very good ports and havens opening upon England, as inviting us to come unto them, to see what excellent commodities that countrey can afford ; besides the soyle it selfe most fertile, fit to yeeld all kinde of fruit that shall be committed thereunto. And, lastly, the heavens most milde and temperate, though somewhat more moist then the parts towards the west.*” — (View of the State of Ireland).

Spenser speaks of the goodly ports and havens opening to England ; Sir John Davis speaks of the safe and large ports and havens lying open for traffick into all the western parts of the world too. He also speaks of the long inlets of many navigable rivers :—“ *During the time of my service in Ireland (which began in the first year of His Majesties reign), I have visited all the provinces of that kingdom, in sundry journeys and circuits ; wherein I have observed the good temperature of the air, the fruitfulness of the soil, the pleasant and commodious seats for habitation, the safe and large ports and havens lying open for traffick into all the western parts of the world ; the long inlets of many navigable rivers, and so many great lakes and fresh ponds within the land, (as the like are not to be seen in any part of Europe); the rich fishings, and wild fowl of all kinds; and, lastly, the bodies and minds of the people endued with extraordinary abilities of nature.*”—(Historical Relations).

Limerick is not a town upon the western coast, but she has the advantage of being deep-set on one of those long inlets towards the heart of the country, and in “ *Mounster, which is the sweetest soyle of Ireland.*”

The city is admirably situated for commerce with the West Indies and America ; and by the Steam Navigation established on the Upper Shannon by Mr. Grantham, and the Canal, and a Mail-coach Establishment, almost as good as any in the empire ; it is now in close union with Dublin, and its highly improved and progressively improving harbour [3], the focus of London, Bristol, Liverpool, and Glasgow.

A Railroad has been also projected by Mr. Nimmo, between Limerick and Waterford.

Now, what I propose is, that Limerick should get the entire advantage of that auspicious geographical position, of which she is but half in possession at present, by reason of those obstructions and perils in her Navigation, which I shall endeavour to point out the means of removing.

Like one of the Spirits described in the Revelation, as bound in the great river Euphrates, so is the commercial spirit of this city bound in the great Shannon ; and my object is to loose it, that it may join “ the spirits that hold the winds of Heaven,” by breaking its bonds, by annihilating those obstacles that now create retardation and peril to the Navigation.

Let any one, supposing those obstructions and perils to be removed, expand before his eyes the map of the world ; let him read the History of the Steam Engine ; and let him at the

same time take another quantity, as a third element, into his calculation, viz. “ *the quantity of mind*” [4] working fervidly and incessantly all over the world, since the days of Watt, to bring Steam Navigation to still higher and higher progressive perfection ;—now, after working his calculation with these geographical, physical, and metaphysical elements, as his data, let him point out another spot upon the globe, so likely as Limerick, to become such a point of contact as I have described.

This city, venerable by its antiquity, and, as I have said, and say again, almost sanctified in Irish history, abounds at this hour with objects of picturesque, and solemn, and romantic interest. The antique Castle, “ built by King John of England,” with its massive towers, washed by the waters of the majestic river ;—the ancient Bridge, Thomond bridge, over which are seen the mountains of Clare ; and at the end of the bridge, opposite the castle, at Thomond gate, is the stone—“ *the Stone of Sorrow*”— on which, according to tradition, was signed, in presence of both armies, the Treaty of Limerick ! At a short distance from the castle, stands the Gothic Cathedral [5], the Church of St. Mary, originally the palace of one of the Irish Kings, with dark trees beneath its tower. In the lower part of the old town, near gardens and orchards, towards that part of the Shannon called the Abbey River, are the remains of priories, monasteries, and convents ; and some of the ancient city-walls are to be seen near St. Peter’s. Here the Nuns of St. Clare have their convent, their solemn little Gothic chapel, and an extensive school. On two sides of their garden are ancient Gothic ruins. The convent of the Ursulines is on the opposite side of the Shannon. The Knights Templars had a preceptory near the river, but, the site alone ss known at present. Baal’s Bridge is an ancient structure, connecting the Irish and English towns, with houses upon its western side. The convents of the Dominican and Augustinian Friars are in the new town, which is built upon what was formally called St. Prior’s Land. This new town ; (New Town Pery) is beautiful. here are extensive quays for the shipping. A new bridge is in progress, which is very much wanted, and will be an extraordinary improvement. The surrounding country is delightful : the women of Limerick are lovely, the men are patriotic, hospitable, and brave.

Such is Limerick at the present hour. The Pool of Limerick is in the Shannon, about a mile below the town. In the Pool [6] are several rocks ; some of them have been always well known — Yemneen’s rock and some others—but another, called Harvey’s rock, has been but lately discovered ; and this, by the breaking of a vessel, half of which happened to lie upon the rock in the receding tide.

Lower down are the Bush rocks, and some others ; but with these I have nothing to do, beyond mentioning their existence ; as there are so many other things, of much greater importance, to be attended to.

By turning to the chart, at Tervoe, lower down the river than the Pool, will be observed a place marked ‘ *Rocky.*’ This is the Cock rock ; and at this point, that part of the Shannon called technically, by Pilots and Seamen, THE NARROWS—a “ wat’ry labyrinth,” in which the Navigation is most intricate and dangerous, has its commencement.

The peril arises —

1st, From the narrowness of the channel, notwithstanding the great expansion of the river.

2nd, From the rapidity of the tide among the rocks and foul grounds—and,

3rd, From the angular settings and driftings of the currents among the rocks and shoals.

A person who had not examined the subject, would be, I think, not easily persuaded, that the actual channel is so narrow as it is in a river that expands so widely as the Shannon below Limerick.

THE NARROWS— with other rocks and shoal-grounds, of less importance, to be mentioned —

The Cock rock.

Harrold's rock.

Two lines of foul ground, near the Kippen rock.

The Kippen rock itself.

The Whelps.

The Scarlet rocks, generally called “ the Scarlets.”

The point of Gregg island.

Shawn-a-Garra, (Cut John) ; and called also “ Dirty Billy^[7]”—a very dangerous sunken rock, at Grass island.

I shall, in another place, give an account of the different angles made by the currents among the rocks, in this part of the river. These currents are, of course, “ most dangerous in the ebb, when the waters are falling off of the mud.”

There are two passages in this part of the river, the north and the south ; and the place where it may be crossed with security, in getting from the north to the south, is marked by the apparent coincidence, or rather approximation of certain trees near the waterside to one of the castles (there are two) of Cratloe. “ When there is a full tide, the southern channel is preferred by Pilots, “ as it is more straight than the north one, and fewer tacks are necessary to be made in it.” There is a certain rock, called Carrick-a-thruce, and when this ceases to be visible, there are always fourteen feet of water in this channel.

By reason of the rapidity and angular settings of the currents which sweep through this part of the river, among the rocks and shoal-grounds, it requires great steadiness and caution in piloting, in crossing from one passage to the other in calm weather, “ *when there is not wind to command a ship ;*” and when, if the wind should altogether fail, unless she can let go her anchor, and very quickly, or can be towed by boats, she is altogether at the mercy of the drifting tide.

There is a great difference between the navigation of a river like the Shannon and the open sea ; in general, in the latter, the great danger is to be apprehended in storms ; in the river, “ where the channel is so narrow, and such a rapid tide.” the great danger is, I think, to be apprehended, in calms. When, as I have just said, there is not wind to command a ship, and she becomes ungovernable, and consequently, unless she can let go her bow anchor without the danger of its going through her bottom, or can be checked by her kedge, or towed by her boat—she must be swept by the tides among the rocks and foul grounds.

A vessel may scud through the outer extremity of Maelstrom [8] in a hurricane, but she is inevitably lost if taken in it by a calm.

The following is a description of the angular driftings of the currents through the Narrows.

1st, From the bight of the Cock rock towards Harrold's rock.

2nd, From Harrold's rock on the Kippen rock.

3rd, From the Kippen down to the south-west, towards the Whelps and Scarlets ; or, if or, if you go the north channel, you get into a current that sets on Crawford's rock from the Whelps.

4th, From the Scarlett towards the tail of Gregg island.

5th, From the tail of Gregg island down towards Carrick-a-dhurtha.

6th, From Carrick-a-dhurtha towards the Hogshead rock.

7th, From the Hogshead rock towards the buoy on Grass island.

8th, " After getting clear of Grass island, the WHOLE TIDE SETS RIGHT DOWN BODILY upon the rock called the Big Bird, near Sod island ; but then, after passing Sod island, there is FAIR PLAY, and a straight tide to Bahy castle."

Now, although I venture to believe that what I have said, will be found to contain its own reason in proving the danger of the Navigation of this part of the river ; yet still, it would be a very wide deviation from the plan upon which such a subject ought to be treated, were I not to give what may be called the experimental test of the truth of what I have affirmed.

In order, therefore, to give the practical illustration, I shall here write *verbatim*, as I wrote it down from the lips of the Pilots themselves, and the Mate of one of the vessels, and a very intelligent Ship-broker, Mr. Parker an account of the wreck of three vessels in this part of the river.

From Mr. Parker I had the following :

" The Albiona, of Dumfries, was endeavouring with a boat a-head, to cross from one channel to the other in a *calm*. The Pilot was Crawford. He hoped to be able to weather the Hogshead rock ; but finding himself unable to do so, and sweeping towards the rock with the current, he let go his anchor ; but it was too late—the vessel struck, her keel was broke, her futtocks, starboard, and larbord were broke—all her flooring were broke : she was obliged to be broken up and utterly unserviceable.

A Ship called the Friendship, was struck by the same Pilot upon the rock called (after him) Crawford's rock; but she was gotten off again with the next tide.

I have not been able to learn the circumstances with sufficient accuracy to venture to give an account of the manner in which this vessel struck.

Account of the Wreck of the Alice and James on the Whelps, in February 1826 ; given me by Martin, her Pilot

" We left the Pool at six in the morning, the wind at south. At the Kippen the wind headed us—the wind wested. There was a *shower of wind*, and a little rain. I boxed her about, her head to the northward. She took the Spit of the Whelps," [a bank of sand near these rocks], and trailed along until she stopped—until her butts opened, and she took in the water."

I asked him why he did not let go the anchor?

He replied, that if he did, it would go through “ her bottom.”

I now give an account of the same thing, by another Limerick Pilot (Magragh), who saw it when it occurred.

“ I was in the Union sloop a-head, down at Newtown—the wind was all a-head—the Alice and James was about a quarter of a mile a-stern : they followed upon the tack to the northward, towards the Spit of the Whelps, when he” [the Pilot Martin] “ thought to stay her. The vessel began to trail in the Spit of the Whelps, and was trailing until she struck. They let go no anchor. After she struck, the wind sprung up fresh.”

The following is an account of the wreck of the Lord Newborough, a Welsh vessel, on the same rocks, last October, and not half a cable’s length from the point where the Alice and James struck upon them last year :

The Pilot, Martin, (one of the sons of the Martin just mentioned), was trying to get across from the north to the south channel ; but he missed both, and struck upon the rocks between the two, by the *failure of the wind, and by coming too far down, in the first instance, and not making his tack in the proper place.*

The Pilot’s account, in presence of the Captain, Mr. Parker, and four other Pilots :

We got under way at the Pool, on the half tide, or a little more than half tide—we carried high water down with us at the lower end of ‘ the Hole.’ A dead calm came ; not a breath of wind out of the heavens. Then a light breeze of wind from the westward— little or none, but what was of it was from the west-ward. We made two or three tacks ; in the first tack the Captain called a boat alongside, and then went down, and then went asleep, [half past eleven or twelve o’clock, noon].—I told the boat to go a-head again. We canted her head away from the north side to the southward—she was dropping down—we expected that she would clear the rock. I hoped to check her head to the southward, but the boat did not work with sufficient power ; for the oars were weak, like, paddles, and so she was swept away by the current, and struck upon the rocks. I told the boat to lie upon the larboard bow, but she kept hanging upon the starboard bow.”

When I inquired about the anchor, whether it was let go, there was an altercation between the Captain and the Pilot on this subject; the Pilot affirming, that there were not hands enough on deck to pay away the cable, and that the Captain ought not to have gone below. To this the Captain replied, that having taken a Pilot, he had nothing to do with the ship while he (the Pilot) was on board ; and he denied that the boat hung upon the larboard bow.

The following is the account given me by the Mate, in the presence of the Harbour-master of Limerick, on board the vessel, as she lay on the rocks the day after her wreck :

“ The wind was fair from the Pool : the wind after some time headed them—a baffling wind ; then a Calm. The boat was sent a-head the first time, then a second. The Pilot ordered to pull round—no wind to command the ship, and the ship became ungovernable ; the tide running strong. They pulled as much as they could, but the heavy tide drifted them along. About mid-channel the wind failed, and she struck upon the rocks ; but half the length of an oar would have saved her.”

This vessel was lost by extremity of bad piloting, and not tacking in time. It is quite clear,

that unless Pilots attend to them, they may just as well have for their land-marks “ a cow and a haystack,” as a mountain and a church-steeple, or a clump of trees and a castle.

It may be perhaps objected to me here, that I am not consistent, in mentioning the wreck of this vessel, when I attribute it altogether to bad piloting. It is not inconsistent : every thing that shows the actual operation of the tides and currents, will be important to those who are to determine whether the improvements I propose are judicious, or the contrary.

I shall now, as very important to the subject, give *verbatim*, what was said to me by the Ship-broker, whom I have already mentioned, on the dangers of the Narrows :

“ The cause why so many accidents occur now, more than formerly, is, that the Pilots are now so enterprizing, that they twist and turn their vessels among these rocks and currents, as if they were Galloways.”—“ It is now, among them, trying who will be the best man, and bring his ship through most rapidly ; but formerly they were slow and steady, and would not attempt the passage, unless the circumstances were all favourable. I have known them more than a week going down to the Hole,” &c. &c. He said, that “ many accidents constantly occur now to vessels, from this cause ; *and that although they escape, they often receive great damage in getting off these rocks*—they injure their keels, and knock off their copper,” &c. &c.

The practical deduction from this is, that vessels are at present placed between the Scylla and Charybdis of danger and delay.

I have, in the head of this Chapter, given an extract from one of my Conversations with the Pilots and Fishermen ; and I now take occasion to mention something which was said to me in the same spirit, on the day when I went down the river to examine the Lord Newborough, as she lay upon the Whelps, and to make inquiries on board of her, into the circumstances under which she had struck upon them. In going down the river, accompanied by Picket, Baldwin, two Martins (father and son), and Magrath, all Pilots, and the Fishermen whom I employed as rowers ; on my inquiring about the part of the Narrows where the vessel had been wrecked, one of the Pilots, after describing it to me, thus concluded—“ *Often the same place made the hair on our head stand on end !*”

I noted these words very particularly at the time ; and I am equally particular in introducing them here, by reason of the coincidence in spirit with what I mentioned before ;— for they appear to indicate a kind of habitude of the sense of danger in this part of the river ;— and the speaker, without any hesitation, took upon him to answer, not only for his own terrors, but for those of all the others who were present too.

Among the perils of the Narrows, it is heart-sickening to be constrained to mention the atrocious spirit of the Cratloe peasantry, who, descending from the woods and mountains in the vicinity, when vessels are in distress, instead of affording them any succour, approach in their boats only for the purposes of plunder. This may be observed even in Limerick itself, from the turrets of the steeple of St. Mary’s Cathedral, with a telescope, where (as there is a view of eighteen miles down the river) the Ship-brokers have a watch, to give notice of the approach of vessels from the Atlantic.

The day before that on which I was aboard the Lord Newborough, the crew had been under the necessity of preparing their arms, to prevent some of the Cratloe-men, who were in a boat alongside from forcing their way on board ; and the day after, one or two of them, who, under some pretext, were admitted, while the crew was engaged in throwing the cargo into lighters, contrived to open the chest upon deck, in which the arms had been laid the day before, and stole out of it a pistol, with which they got away.

The son of another Limerick Ship-broker (Mr. Mullock, jun.), mentioned to me, that in the last year of the late war, his father had been obliged to send a corporal's guard on board some of his ships, to prevent them from being boarded and plundered in passing this part of the river.

A western, boat was some years ago plundered by these mountain robbers ; the unhappy crew was murdered, and then buried in the mud.

There is, near Kilbaha bay, in the lower Shannon, a spot believed to be haunted. The crew of a Portuguese vessel was here savagely murdered ; and their spirits are believed by the peasantry to glide at midnight about the place where this deep damnation was perpetrated.

Among many other superstitious and romantic legends of this part of Ireland, is one of a spectres-ship, that shews itself amidst the storms.

There is a point which ought not to be omitted by any one who writes upon the means of diminishing the dangers of the Navigation of this part of the Shannon. Pilots ought to be ordered to ascertain with accuracy, for themselves, what number of feet of water the vessels draw that they take in charge, and not to depend upon the reports of any other person whatever. A Master told a Pilot that his vessel drew thirteen feet ten inches ; now she really drew fourteen feet and a half. I give this as an example.

[1] Milton. Paradise Lost.

[2] The Communicating Diving-bell.

[3] Howth Harbour, and Kingstown, have been, as it wore, created in addition to the old ones.

[4] For this admirable form of expression, I am indebted to my friend Mr. Penn, the Engineer. —“ That depends,” said he to me one day, “upon the quantity of mind a man has.”

[5] In this, the Irish garrison laid down their arms to Ireton.

[6] “ Vessels that draw seven or eight feet, may ride afloat in it; and, as the bottom is soft mud ,large vessels may not be afraid to lye aground on it. Ships that draw twelve feet, by waiting till half flood, may get up to the Pool of Limerick.” *Norie's piloting directions for the South, West and North coast of Ireland.*

[7] So named, I should imagine, after King William the Third.

[8] Round the shores where loud Lafoden
Whirls to death the roaring whale.

CAMPBELL. *Ode to Winter.*

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