

a projected play, the character of the cardinal is finely conceived. He is to have "no element *not* common to all men and no element *as* common to all men,—a life such as every man *might* lead but no man *does* lead,—in which the things done are *not* those which men do rarely, but the common acts of men done in a rare spirit." Dobell's prose writings are studded with such suggestive sentences as we have quoted. The singular truth of his observations of nature is well seen in his description of the "Symptoms of the Dissolution of Night" (*Thoughts*, p. 83.) His prose style lacks simplicity, both in the individual words used and in the structure of the sentences. The classical element is much too prominent in his vocabulary. In his religious views, Dobell was a Christian of the Broad Church type. Socially he was one of the most amiable and true-hearted of men. He will long be remembered as an admirable song-writer, a suggestive and original thinker, and an ardent lover of political liberty. The standard edition of his poems is edited by Professor Nichol of Glasgow University, who has prefixed to the work a beautifully written life.

(T. G.)

DÖBELN, a town of Saxony, in the circle of Leipsic, and 35 miles to the south-east of that town, standing partly on an island formed by the Mulde. It is the centre of a considerable corn trade. The manufactures are cloth, cordwain and other leather, shoes, hats, belts lacquered tin ware, agricultural and weighing machines, and cigars. Population, 10,969 in 1875.

DOBERAN, or DOBBERAN, a market town of Northern Germany, in the grand duchy of Mecklenburg-Schwerin, about two miles from the shores of the Baltic, and seven west of Rostock. Besides the ruins of a Cistercian abbey founded by Pribislav II. in 1173, and secularized in 1552, it possesses a church of the 14th century, which ranks as one of the finest in Northern Germany, a grand-ducal palace, a theatre, an exchange, and a concert-room. In 1793 Duke Frederick Francis caused the first seaside watering-place in Germany to be established on the neighbouring coast, at the spot where the Heiliger Damm, a great bank of rocks about 1000 feet broad and 15 feet high, stretches out into the sea and forms an excellent bathing ground. Though no longer so popular as in the early part of the century, it is still frequented. In the immediate neighbourhood of the town three mineral springs were discovered in 1829—one sulphurous, a second saline, and the third chalybeate. Population in 1875, 3866.

DÖBRENTÉI, GÁBOR (i.e., GABRIEL) (1786–1851), an Hungarian philologist and antiquary, was born at Nagyszöllös in 1786. He completed his studies at the universities of Wittenberg and Leipsic, and was afterwards engaged as a tutor in Transylvania. At this period he originated and edited the *Erdélyi Múzeum*, which, notwithstanding its important influence on the development of the Magyar language and literature, soon failed for want of support. In 1820 Döbrentéi settled at Pesth, and there he spent the rest of his life. He held various official posts, but continued zealously to pursue the studies for which he had early shown a strong preference. His great work is the *Ancient Monuments of the Magyar Language* (*Régi Magyar Nyelvelemlekek*), the editing of which was intrusted to him by the Hungarian Academy. The first volume was published in 1838 and the fifth was in course of preparation at the time of his death. Döbrentéi was one of the twenty-two scholars appointed in 1825 to plan and organize, under the presidency of Count Teleki, the Hungarian Academy. In addition to his great work he wrote many valuable papers on historical and philological subjects, and many biographical notices of eminent Hungarians. These appeared in the Hungarian translation of Brockhaus's *Conversations-Lexikon*. He translated into

Hungarian *Macbeth* and other plays of Shakespeare, several of Schiller's tragedies, and Molière's *Avare*, and wrote several original poems. His article on "Magyar Literature" in the *Conversations-Lexikon* was translated into English. Döbrentéi does not appear to have taken any part in the revolutionary movement of 1848. He died at his country house, near Pesth, March 28, 1851.

DOBRIZHOFFER, MARTIN (1717–1791), a Roman Catholic missionary, whose fame is preserved by the historical interest and the literary character of his narrative. Born at Gratz, in Styria, he joined the Society of Jesus in 1736, and in 1749 proceeded to Paraguay, where for eighteen years, first among the Guaranis, and latterly among the Abipones, he continued with steadfast devotion and easy cheerfulness to discharge the difficult and hazardous duties of his profession. Returning to Europe on the expulsion of the Jesuits from South America, he settled at Vienna, obtained the patronage, or rather the friendship, of Maria Theresa, survived the extinction of his order, composed the history of his mission, and died on July 17, 1791. His history appeared at Vienna in 1784, in the author's own Latin, and in a German translation by Professor Krail of the university of Pesth. Of the contents of the work some idea may be obtained from its extended title:—*Historia de Abiponibus, Equestri Bellicosaque Paraguarie Natione, locupletata Copiosis Barbararum Gentium Urbium, Fluminum, Fecarum, Amphibiorum, Insectorum, Serpentium præcipuorum, Piscium, Avium, Arborum, Plantarum alicarumque ejusdem Provinciae Proprietatum Observationibus*. The "lively singularity" and garrulous quaintness of the style could only be displayed by lengthened quotation. In 1822 there appeared in London an anonymous (not altogether complete) translation, which has not unfrequently been ascribed to Southey, but was really the work of Sam Coleridge, who, while still in her teens, had undertaken the task to defray the college expenses of one of her brothers. To the youthful translator a delicate compliment was paid by Southey in the third canto of his *Tale of Paraguay*, the story of which was derived from the pages of Dobrizhoffer's narrative:—

"And if he could in Merlin's glass have seen
By whom his tomes to speak our tongue were taught,
The old man would have felt as pleased, I ween,
As when he won the ear of that great Empress Queen."

DOBROWSKY, JOSEPH (1753–1829), one of the earliest and greatest of Slavonic philologists, was born of Bohemian parentage at Gjermet, near Raab, in Hungary. He received his first education in the German school at Bischofteinitz, made his first acquaintance with Bohemian at the Deutschbrod gymnasium, studied for some time under the Jesuits at Klattau, and then proceeded to the university of Prague. In 1772 he was admitted among the Jesuits at Brünn; but on the dissolution of the order in 1773 he returned to Prague to study theology. After holding for some time the office of tutor in the family of Count Nostitz, he obtained an appointment first as vice-rector, and then as rector, in the general seminary at Hradisch; but in 1790 he lost his post through the abolition of the seminaries throughout Austria, and returned as a guest to the house of the count. In 1792 he was commissioned by the Bohemian Academy of Sciences to visit Stockholm, Abo, Petersburg, and Moscow in search of the manuscripts which had been scattered by the Thirty Years' War; and on his return he accompanied Count Nostitz to Switzerland and Italy. His reason began to give way in 1795, and in 1801 he had to be confined in a lunatic asylum; but by 1803 he had completely recovered. The rest of his life was mainly spent either in Prague or at the country-seats of his friends Counts Nostitz and Czernin; but his death took place at Brünn, whither he had gone in

1828 to make investigations in the library. While his fame rests chiefly on his philological labours, his botanical studies are not without value in the history of the science. The following is a list of his more important works; and it will be observed that, dealing, as they do, with Slavonic subjects, they are all composed in Latin or German:—

Fragmentum Pragense evangelii S. Marci, vulgo autographi, 1778; a periodical for Bohemian and Moravian Literature, 1780–1787; *Scriptores Rerum Bohemicarum*, 2 vols. 1783; *Geschichte der böhm. Sprache und ältern Literatur*, 1792; *Die Bildsamkeit der slavo. Sprache*, 1799; a *Deutsch-böhm. Wörterbuch* compiled in collaboration with Leschka, Puchmayer, and Hanka, 1802–1821; *Entwurf eines Pflanzensystems nach Zahlen und Verhältnissen*, 1802; *Glagolitica*, 1807; *Lehrgebäude der böhm. Sprache*, 1809; *Institutiones lingue slavicae dialecti veteris*, 1822; *Entwurf zu einem allgemeiner Etymologikon der slavo. Sprachen*, 1813; *Slovanka zur Kenntniss der slav. Literatur*, 1814; and a critical edition of Jordanes, *De Rebus Geticis*, for Pertz's *Monumenta Germanica historica*. See Palacky, *J. Dobrowsky's Leben und gelehrtes Wirken*, 1833.

DOBRUDJA, or DOBRUDSCHA, in Bulgarian Dobritch, is the district lying between the Black Sea and the lower reaches of the Danube, by which it is separated from Roumania. The southern part of its area of 2900 square miles is occupied by an irregular steppe stretching north from the Balkan range; while the northern belongs to the alluvial tract produced by the action of the river. The predominant element in its heterogeneous population, which is estimated at 160,000, consists of the Tatars, whose numbers have been greatly augmented by immigration since 1859; but there are also Turks, Bulgarians, Roumanians, Greeks, Armenians, Germans, and Jews, and all the various nationalities remain strikingly distinct, and usually occupy more or less exclusively their separate settlements. The principal places in the Dobrudja are Rassoza, Hirsova, Matchin, Isakcha, and Tulcha on the Danube; Babadagh towards the north, which was formerly regarded as the chief town of the district; Kustendji, Mangalia, and Belchik on the coast; Basardjik towards the south and some distance inland; and, finally, the new Tatar city of Medjidia, which has sprung up since 1860 on the railway between Tchernavoda and Kustendji. The strategical importance of the Dobrudja was recognized by the Romans who in the reign of Trajan built a line of fortifications from the river near Rassoza to the coast near Kustendji; and in modern times it has been more than once utilized, especially during the Russian invasions of 1828, 1854, and 1877. See Peters, *Grundlinien zur Geographie und Geologie der Dobrudscha*, Vienna, 1867–1868.

DOBSCHAU, or DOBSINA, a town of Northern Hungary, in the comitat of Gömör, on the Dobsina. In the vicinity are mines of iron, copper, cobalt, and mercury. Population, 5505 in 1869.

DOBSON, WILLIAM (1610–1646), an English portrait and historical painter, born at London in 1610. His father was master of the Alienation Office, but by his improvidence had fallen into reduced circumstances. The son was accordingly bound an apprentice to Peak, a stationer and picture dealer in Holborn Bridge; and while in his employment he began to copy the pictures of Titian and Vandyck, whose manner he ever after retained. He also took portraits from life under the advice and instruction of Francis Cleyn, a German artist of considerable repute. Vandyck, happening to pass a shop in Snow Hill where one of Dobson's pictures was exposed, sought out the artist, and presented him to Charles I., who took Dobson under his protection, and not only sat to him several times for his own portrait, but caused the prince of Wales, Prince Rupert, and many others, to do the same. The king had a high opinion of his artistic ability, styled him the English Tintoret, and appointed him sergeant-painter on the death of Vandyck. After the fall of Charles, Dobson was reduced to great poverty, and fell into dissolute habits.

He died at the early age of thirty-six. Excellent examples of Dobson's portraits are to be seen at Blenheim, Chatsworth, and several other country seats throughout England. The head in the Decollation of St John the Baptist at Wilton is said to be a portrait of Prince Rupert.

DOCETÆ (from *dokein*, to appear), a name applied to those heretics in the early Christian church who held that Christ, during his life, had not a real or natural, but only an apparent or phantom body. Other explanations of the *dokein*, or appearance, have, however, been suggested, and in the absence of any statement by those who first used the word of the grounds on which they did so, it is impossible to determine between them with certainty. The name Docetæ is used by Clement of Alexandria as the designation of a distinct sect, of which he says that Julius Cassianus was the founder. Docetism, however, undoubtedly existed before the time of Cassianus. The origin of the heresy is to be sought in the Greek, Alexandrine, and Oriental philosophizing about the imperfection or rather the essential impurity of matter. Traces of a Jewish Docetism are to be found in Philo; and in the Christian form it is generally supposed to be combated in the writings of John, and more formally in the epistles of Ignatius. It differed much in its complexion according to the points of view adopted by the different authors. Among the Gnostics and Manichæans it existed in its most developed type, and in a milder form it is to be found even in the writings of the orthodox teachers. The more thoroughgoing Docetæ assumed the position that Christ was born without any participation of matter; and that all the acts and sufferings of his human life, including the crucifixion, were only apparent. They denied, accordingly, the resurrection and the ascent into heaven. To this class belonged Dositheus, Saturninus, Cerdo, Marcion, and their followers, the Ophites, Manichæans, and others. The other, or milder school of Docetæ, attributed to Christ an ethereal and heavenly instead of a truly human body. Amongst these were Valentinus, Bardesanes, Basilides Tatianus, and their followers. They varied considerably in their estimation of the share which this body had in the real actions and sufferings of Christ. Clement and Origen, at the head of the Alexandrian school, took a somewhat subtle view of the incarnation, and Docetism pervades their controversies with the Monophysites. Docetic tendencies have also been developed in later periods of the church's history, as for example by the Priscillianists and the Bogomiles, and also since the Reformation by Jacob Boehme, Menno Simonis, and a small fraction of the Anabaptists. Docetism springs from the same roots as Gnosticism, and the Gnostics generally held Docetic views. Accordingly, for a fuller account of the principles out of which Docetism arose, and of the various modifications it assumed, the reader is referred to the article Gnosticism. See also the articles on the leading Docetæ mentioned above.

DOCK, the name applied to the plants constituting the section *Lapathum* of the genus *Rumex*, and natural order *Polygonaceæ*. The leaves of the docks are pinnate-veined, and are never sagittate or hastate; the flowers, which are arranged in two to five rows, in alternate fascicles similar to whorls, are generally perfect, and have three free styles, multifid stigmas, six stamens, and the three inner perianth-segments or petals in some cases tubercled; the fruit is an achene (see vol. iv. p. 150). In the Common or Broad-leaved Dock, *Rumex obtusifolius*, the flower-stem is erect, branching, and 18 inches to 3 feet high, with large radical leaves, heart-shaped at the base, and more or less blunt; the other leaves are more pointed, and have shorter stalks. The whorls are many-flowered, close to the stem, and mostly leafless. The root is many-headed, black externally, and yellow within. The flowers appear from June to

August. In autumn the whole plant may become of a bright red colour. It is a troublesome weed, common by roadsides and in fields, pastures, and waste places throughout Europe. An infusion of its root has been used as a remedy for ichthyosis; in large quantities it acts as a purgative. The powdered root is sometimes employed as a dentifrice. The Great Water Dock, *R. Hydrolapathum*, believed to be the *herba britannica* of Pliny (*Nat. Hist.*, xxv. 6), is a tall-growing species; its root is used as an antiscorbutic. The root of the Curled Dock, *R. crispus*, affords an ointment and decoction reputed to be cures for scabies; and the seeds of the same species have been found efficacious in dysentery. Other British species are the Sharp Dock, *R. conglomerata*, the root of which has been employed in dyeing; the Bloody-reined Dock, or Bloodwort, *R. sanguineus*; the Yellow Marsh Dock, *R. palustris*; the Fiddle Dock, *R. pulcher*; the Golden Dock, *R. maritimus*; the Grainless Curled Dock, *R. domesticus* (*= aquaticus*); and the Meadow Dock, *R. pratensis*. The naturalized species, *R. alpinus*, or "Monk's Rhubarb," was early cultivated in Great Britain, and was accounted an excellent remedy for ague.

DOCK. See HARBOURS.

DOCKYARDS. Previously to the reign of Henry VIII, the kings of England had neither naval arsenals nor dockyards, nor any regular establishment of civil or naval officers to provide ships of war, or to man them; they had admirals, however, possessing a high jurisdiction and very great power (see the article ADMIRAL). There are strong evidences of the existence of dockyards, or of something answering thereto, at very early dates, at Rye, Shoreham, and Winchelsea. In November 1243 the sheriff of Sussex was ordered to enlarge the house at Rye in which the king's galleys were kept, so that it might contain seven galleys. In 1238 the keepers of some of the king's galleys were directed to cause those vessels to be breamed, and a house to be built at Winchelsea for their safe custody. In 1254 the bailiffs of Winchelsea and Rye were ordered to repair the buildings in which the king's galleys were kept at Rye. At Portsmouth and at Southampton there seem to have been at all times depôts both for ships and stores, though there was no regular dockyard at Portsmouth till the reign of Henry VIII. It would appear, from a very curious poem in Hakluyt's *Collection*, called *The Poetics of Keeping the Sea*, that Henry V. had ships, officers, and men exclusively appropriated to his service, and independently of those which the Cinque Ports were bound, and the other ports were occasionally called upon, to furnish on any emergency. By this poem it also appears that Little Hampton, unfit as it now is, was the port at which Henry built

his great *Dromions*

Which passed other great shippes of the commons.

The "dromion," "dromon," or "dromedary," was a large war ship, the prototype of which was furnished by the Saracens. Roger de Hoveden, Richard of Devizes, and Peter de Longtoft celebrate the struggle which Richard I., in the "Trench the Mer," on his way to Palestine, had with a huge dromon,—"a marvellous ship! a ship than which, except Noah's ship, none greater was ever read of." This vessel had three masts, was very high out of the water, and is said to have had 1500 men on board. It required the united force of the king's galleys, and an obstinate fight, to capture the dromon.

The foundation of a regular navy, by the establishment of dockyards, and the formation of a board, consisting of certain commissioners for the management of its affairs, was first laid by Henry VIII.; and the first dockyard erected during his reign was that of Woolwich. Those of Portsmouth, Deptford, Chatham, and Sheerness followed

in succession. Plymouth was founded by William III. Pembroke was established in 1814, a small yard having previously existed at Milford.

From the first establishment of the dockyards to the present time, most of them have gradually been enlarged and improved by a succession of expedients and makeshifts, which answered the purposes of the moment; but the best of them have not possessed those conveniences and advantages which might be obtained from a dockyard systematically laid out on a uniform and consistent plan, with its wharfs, basins, docks, slips, magazines, and workshops arranged according to certain fixed principles, calculated to produce convenience, economy, and despatch.

Neither at the time when our dockyards were first established, nor at any subsequent periods of their enlargement, could it have been foreseen what incalculable advantages would one day be derived from the substitution of machinery for human labour; and without a reference to this vast improvement in all mechanical operations, it could not be expected that any provision would be made for its future introduction; on the contrary, the docks and slips, the workshops and storehouses, were successively built at random, and placed wherever a vacant space would most conveniently admit them, and in such a manner as in most cases to render the subsequent introduction of machinery and railways, and those various contrivances found in large private manufacturing establishments, quite impossible, even in the most commodious of Her Majesty's dockyards.

From a brief description of the royal dockyards as they now stand a general idea may be formed of their several capacities, advantages, and defects. Taking them in succession, according to their vicinity to the capital, the first is DEPTFORD.—Deptford dockyard was first established about the year 1513, and continued to be a building yard, as well as a large depôt for naval stores, until 1869, when it was closed as a building yard in pursuance of a recommendation of a committee of the House of Commons, which reported in 1864. The increasing size of ships of war rendered the yard unsuitable for any but the smaller types of vessels, while the continuous deposits of river mud, not only along the frontage but also in the docks and basins, rendered it a costly and decreasingly valuable place of construction. It had an interesting history. Not only were some of the most celebrated ships of the navy built there, but during the Great Plague the office of the Admiralty was removed thither from Seething Lane. Peter the Great worked in the yard as a shipwright, dwelling the while at Sayes Court, the residence of Evelyn, the author of *Sylva* and of the diary not less famous than Pepys's. Evelyn was the grantee of some of the ground on which the dockyard stood, for no other consideration than that there should always be a keel laid down in the yard. Queen Elizabeth's Admiralty officials were at one time resident at Deptford; and thither went the queen in 1580 to confer the honour of knighthood on Sir Francis Drake, and to dine with him on board the ship in which he had circumnavigated the world.

Though closed as a building yard in 1869, in accordance with the recommendation of a committee of the House of Commons, part of the establishment, with suitable storehouses, was retained as a depôt for naval stores, and as the one place from which shipments of stores to naval depôts abroad should be made. Of the residue, part was sold to Mr Evelyn, who made the purchased part into a recreation ground for the Deptford people, and gave it to them. The rest was sold for a metropolitan meat market to the Corporation of London. When intact the front or wharf wall of this dockyard, facing the Thames, was about 1700 feet in length, and the mean breadth of the yard 650 feet; the superficial content about 30 acres. It had three slips

for ships of the line on the face next the river; and two for smaller vessels, which launched into a basin or wet dock, 260 by 220 feet. There were also three dry docks,—one of them a double dock, communicating with the Thames, and the other a smaller one, opening into the basin. The number of men employed in this yard, in time of war, was about 1500, of whom one-half were shipwrights and artificers, and the other half labourers. There were, besides, 18 or 20 teams of 4 horses each, to drag timber and heavy stores.

The proximity of Deptford yard to the capital is of great importance, in the convenience it affords for receiving from this great mart all the home manufactures and products which may be purchased for the use of the navy. It is the general magazine of stores and necessaries for the fleet, whence they are shipped off, as occasion requires, to the home yards, the outports, and the foreign stations, in store-ships, transports, coasting sloops, lighters, and launches, according to the distance they have to be sent.

The management of Deptford naval store yard is now merged in that of the victualling yard, a most complete establishment of its kind. Till 1869 this management comprised a naval captain superintendent, with a master in the navy as his assistant. Under them a storekeeper, a store receiver, an accountant, an inspector of stores, and their respective staffs, conducted the administrative duties of the place. In 1869 the Board of Admiralty, in accordance with the recommendations of a departmental committee, abolished the offices of captain superintendent and master attendant, and placed the establishment under the civilian management of the storekeeper. The naval superintendents were appointed for five years, and after that time were withdrawn to make way for others. The superintending storekeeper is appointed as a permanent officer, and under him experience is accumulated and applied in all the manufactures and other business departments of the yard. The manufactures conducted by and for the Government at Deptford comprise biscuit making on such a scale as to supply, with the yield of the victualling yards at Gosport and Plymouth, biscuit enough for the whole navy, and also chocolate making, mustard making, flour grinding, and the operations of a large cooperage. Most of the salt beef required for the navy is salted and put up there. Deptford may be called the heart of the victualling service. From its stores are shipped the whole of the consignments required for replenishment of depôts abroad, as well as the requirements of the other two victualling yards in England, except that at the last-named the supplies of biscuits and flour are provided on the spot. The number of men employed at Deptford necessarily varies. During war upwards of a thousand men are required. The space occupied by the victualling yard is about 19 acres. There is a river frontage of 1700 feet, and a mean depth of 1000 feet.

In 1877 there are employed in the naval store and victualling yard at Deptford 258 men on the establishment, and 390 men on the hired list, at a cost of £25,847.

WOOLWICH DOCKYARD.—This no longer exists as a naval station. Though retaining its name, it remains as a depôt in the hands of the War Department, for whose work its river frontage of 3680 feet, and its docks and basins, afford excellent accommodation. Woolwich was the first and most ancient of all the dockyards, having been established in the reign of Henry VII. From it have been launched some of the finest and most celebrated ships of the English navy. In 1512 the "Harry Grace de Dieu" was built, and in 1552 was accidentally burnt there. In more modern times the "Nelson" and the "Ocean" were from Woolwich, and those latest specimens of the now extinct class of fighting ship, the "Trafalgar," "Agamemnon," and "Royal Albert." As an establishment for the building

and repair of ships, especially steam ships, Woolwich was perhaps the completest and best furnished of all the dockyards. Its power to make and repair engines and all iron work, whether of ship or fittings, was so extensive as to enable the Government, before the introduction of iron-clads, to be nearly independent of the private trade. With occupation for 1800 workmen, it was able to rely upon its own resources almost exclusively. Its proximity to London gave it other great advantages, including this, that the Admiralty were thereby enabled the more easily to supervise the constructive work for which its architects were responsible. But for the fatal operation of two causes, the increased and increasing depth of ships of war, and the continuous silting of the river into the docks and basins of the yard, Woolwich would probably have remained one of the chief dockyards. Both these causes, however, operated. The depth of the "Nelson's" hold had to be lessened in order to ensure her passing Erith; and it was stated in the *Eighth Report of the Select Committee on Finance* (1818) that "the wharf wall at Woolwich, owing to the action of the tide on the foundation, is in a falling state, and in danger of being swept into the river, it being secured only in a temporary manner; and requires to be immediately rebuilt in a direction that will preserve it from similar injury hereafter, and prevent, in a great degree, that accumulation of mud which has, in the course of the last ten years, occasioned an expense of upwards of £125,692, and would threaten in time to render the yard useless." Till 1869, however, notwithstanding the recommendations of a parliamentary committee, and the frequent urgings of members on both sides of the House of Commons, Woolwich yard was kept open. Then, in accordance with a policy long commended, it was closed, steps were taken to dispose of the plant and material that remained, and the place itself was handed over, with its workshops and factories, to the War Department in 1872.

WOOLWICH DIVISION OF ROYAL MARINES.—About the same time that the dockyard was broken up, the division of marines—no longer in contact with ships and shipping—was abolished, and its strength was distributed between the divisions at Chatham and Plymouth.

CHATHAM DOCKYARD.—This dockyard, founded by Queen Elizabeth, though not on the present site, is situated on the right bank of the Medway, to which it presents a line of wharfage extending 10,000 feet, and of embankment 4500 feet more. The superficial contents may be estimated at about 500 acres. The old part of the yard has seven building-slips on the front, from which ships are launched into the river, all equal to the building of ships of the line, and three others for frigates and smaller vessels. In the same front are four dry docks communicating with the Medway. At the southern extremity of the yard is the ropery, 1248 feet in length and 47½ feet in width, in which are employed about 250 persons. It is equal to the manufacture of every description of cordage required for the naval service, including the largest size cable. The hemp houses, 306 feet long by 36 feet wide, are equal to the stowage of 1600 tons of hemp and 3000 hails of yarn. Next to these are the slips and docks, with the working-sheds and artificers' shops close in the rear, an excellent smithery, timber-berths, seasoning sheds, deal and iron yard, &c., and beyond these, on the eastern extremity of the yard, the officers' houses and gardens. The superintendent's house is situated nearly in the centre of the yard. The lower or north-eastern part of the old yard is occupied by mast-ponds, mast-houses and slips, store-boat houses and slips, ballast wharf, timber-berths, and saw-pits.

Before the construction of the extension works in 1867-73, there was no wet dock or basin in Chatham-yard; but the