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Stern of British Man-of-War of the Stuart Period.

JULY 1916

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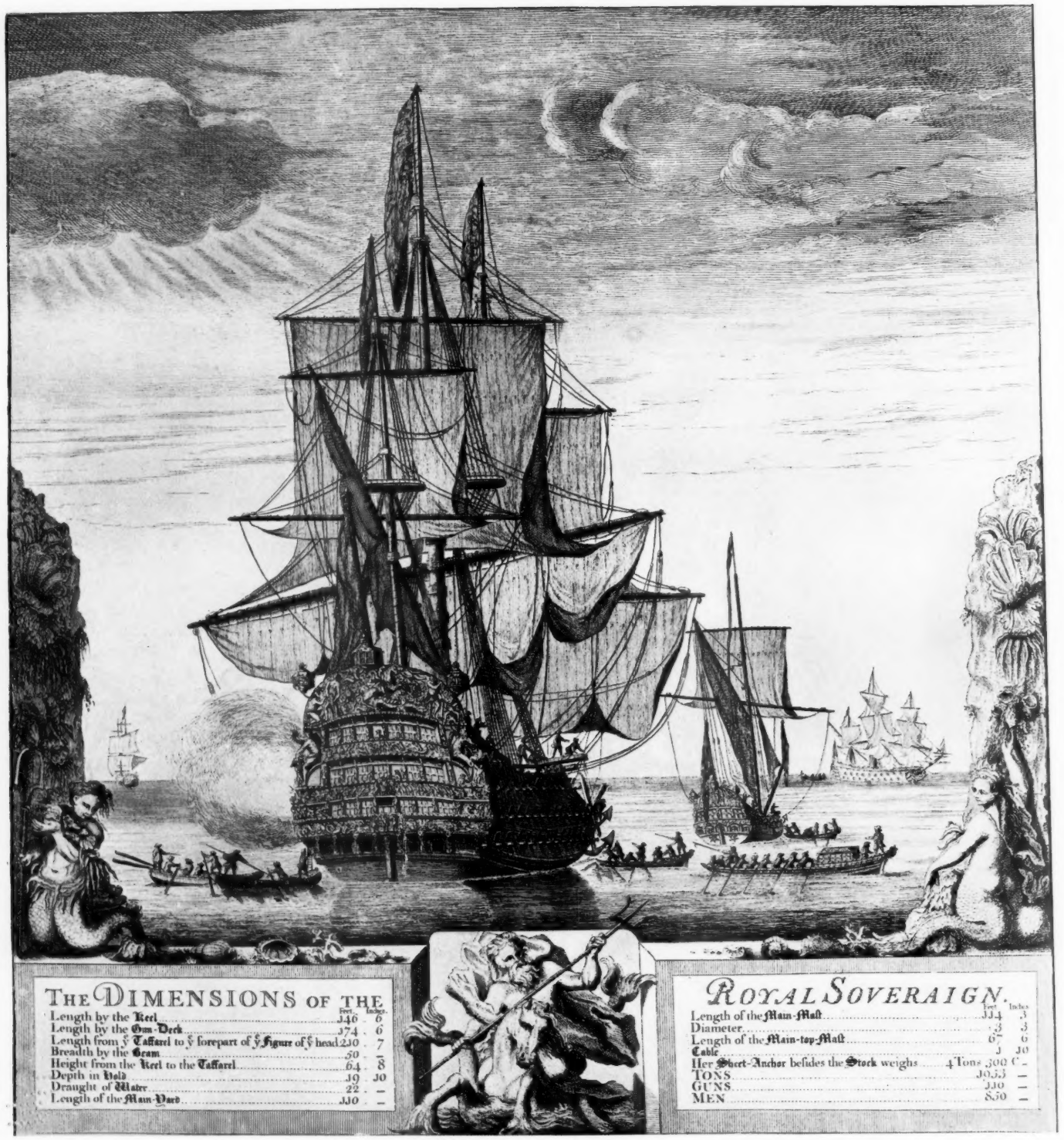


THE DIMENSIONS OF THE ROYAL SOVERAIGN.	Feet.	Inches.
Length by the Keel	146	6
Length by the Gun-Deck	174	6
Length from ye Taffarel to ye forepart of ye Figure of ye head	210	7
Breadth by the Beam	50	—
Height from the Keel to the Taffarel	64	8
Depth in Hold	19	10
Draught of Water	22	—
Length of the Main-Yard	110	—

ROYAL SOVERAIGN.	Feet.	Inches.
Length of the Main-Mast	114	3
Diameter	3	3
Length of the Main-top-Mast	67	6
Cable	1	10
Her Sheet-Anchor besides the Stock weighs	4 Tons	300 C —
TONS	1053	—
GUNS	110	—
MEN	850	—

Plate I. July 1916.

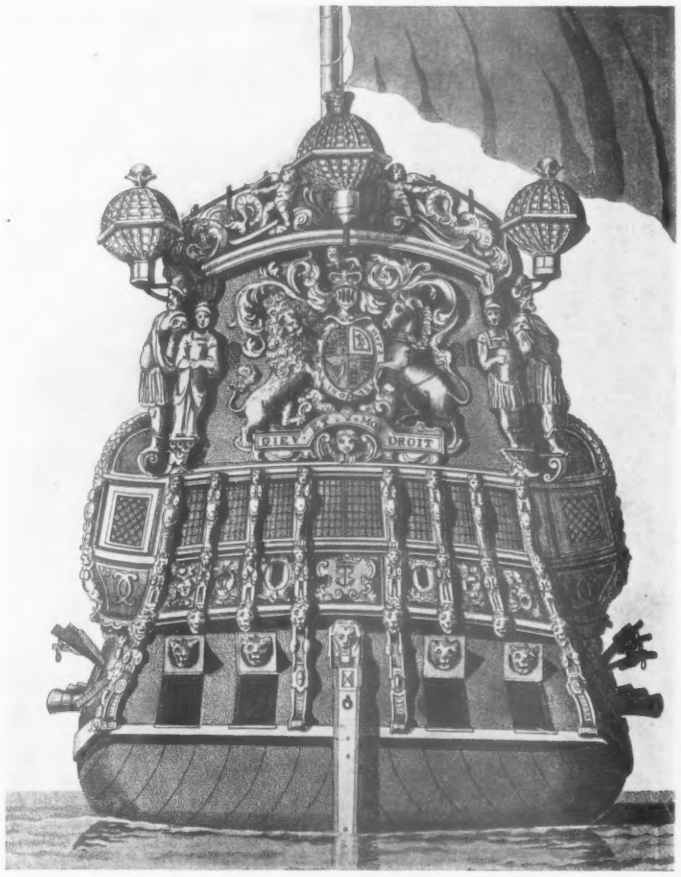
THE "ROYAL SOVEREIGN," LAUNCHED IN 1637.

From an Engraving by T. Baston.

NAVAL ARCHITECTURE AND DECORATION OF THE PAST.

IN treating of the design and embellishment of wooden ships, as a phase of the architectural expression of the Renaissance, it will be necessary first to discuss the evolution of naval construction during three centuries, from the middle of the reign of Henry VII to the accession of Queen Victoria. The first period of naval history in Great Britain begins with the rule of Alfred and extends to that of Henry VIII, during which time it was in a rudimentary condition, for the ships of that period were little better than floating tubs, scientific navigation was unknown, and tactics had not been studied. The second period coincides with the foreign policy of Henry VIII. Ships were then developed from the galley to the man-of-war, construction was elevated to an art, and navigation to a science; for the next three hundred years enormous strides were to be made, although wind continued as the motive of propulsion. The third period includes the infancy of steam and the employment of steel for construction: and so events have progressed with many fluctuations.

Visiting the Painted Hall at Greenwich Hospital, and standing in front of the portraits of admirals and the battle pictures by Turner and Loutherbourg, one may feel privileged to live anew among famous seafights and naval commanders. The pictures take one back through the centuries. There is Howard of Effingham, who disobeyed Elizabeth and prepared to meet the Armada, looking austere in robes and ruff; the great Hawkins, adventurous Drake, and the thin-visaged Cavendish; Raleigh in trunk hose with huge roses on his shoes, and the grave-looking burgher Marten Harpertzoon Tromp, Admiral of Holland, killed in action with the English fleet off the Texel—the same valiant Van Tromp who swept the Channel with a broom at his masthead and defied that old sea-dog Blake. It is honourable to us that we should pay homage to courageous foes. The portraits are numerous; there is Sir George Rooke, who shattered the naval schemes of Louis XIV at La Hogue, the elder Byng, Sir Cloudesley Shovell, Lord Hawke, and sturdy Benbow, Jervis, Duncan, Nelson, and Exmouth—noble commanders of brilliant ships. Even a careful inspection of the paintings does not give one a complete impression; but it is possible to lift the curtain and pry into the old world, to come to some understanding of what the beginnings of sea-power meant to England, to glance at the men and their engines of war, and through the medium of the artist's brush to contrast the stirring scenes of the past with the greater events of to-day. From admirals and battles we can descend to more intimate things, the cunning shipcraft of the family of Pett and Sir Anthony Deane, the glorious designs made for Colbert by Pierre Puget, and gossipy selections from the diary of Mr. Secretary Pepys.



STERN OF BRITISH MAN-OF-WAR OF THE STUART PERIOD.

It has been said that a King of England would consult his dignity by giving audience to foreign ambassadors in the cabin of a man-of-war. In bygone days no more appropriate place could have been chosen, for if the interiors of the officers' quarters were half as sumptuous in design as the elaborate poops, they must indeed have been alluring. Unfortunately, none of the earlier ships have been preserved intact for our benefit; but it is possible by a study of Vandevelde's pictures and the line drawings made by Baston in the reign of George II, as well as from the series of fine plates in the History compiled by Charnock, to gain a fair idea of the art of decoration as applied to the embellishment of ships of war. Additional evidence is afforded by the charm and faultless accuracy of the beautiful scale models forming part of the collections at the United Service Museum, Whitehall, and in the Naval Museum at Greenwich.

The history of the established Royal Navy begins with the building of the *Great Harry*, an unwieldy wooden castle of two decks, which cost fifteen thousand pounds, and was accidentally burnt at Woolwich in the year 1553. This ship was followed by the *Sovereign*, built in the reign of Henry VIII and considered at the time to be the largest ship in Europe; it was, however, destined to be short-lived, for it was destroyed in close action with a French ship, the *Cordelier*. In consequence of the loss of the *Sovereign*, the King ordered a still larger ship to be constructed, the *Henry Grace de Dieu*, built in 1515 at Erith, and stated by Pepys in a list of the Navy to have been of 1,500 tons burthen. It was on this vessel that Henry VIII sailed to Calais in 1520 to confer with François I. This clumsy tub rolled badly at sea, and was not trusted by the sailors; she was dismantled at Bristol, but continued in the Navy until 1552. The *Henry Grace de Dieu*, notwithstanding the clumsy character of her build, was a forerunner of many stout ships.

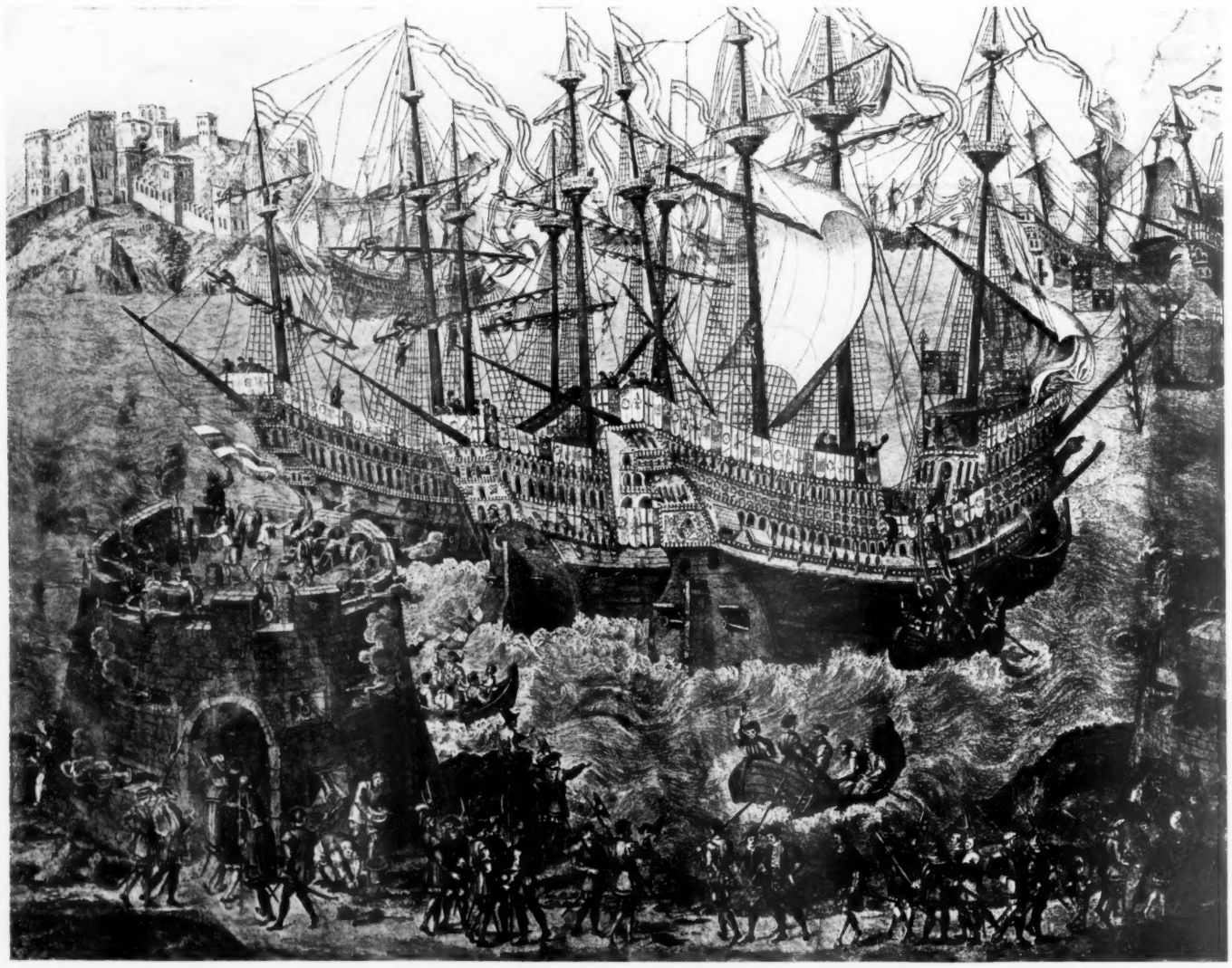
During the middle of the sixteenth century the Navy declined, but with the accession of Queen Elizabeth a new era opened in maritime history, for private enterprise in navigation was encouraged by the Queen and her council. Then came the menace of Spain and the gathering of all available English ships to encounter the enemy. A general idea of the lines of an Elizabethan ship of war can be gathered

from the illustration on the opposite page. It will be seen that a great advance had been made over the towering castles of the first half of the century: the sea lines are more definite and the tumbling home of the side walls more reasonable. Sir Walter Raleigh made an interesting comment when he wrote "in my own time the shape of our English ships has been greatly bettered." At this period, and down to the time of Elizabeth's death, ships of the first class averaged a thousand tons in burthen and carried sixty-eight guns, the total number of vessels in the Navy amounting to forty-two.

Early in the seventeenth century Raleigh wrote the first work dealing with naval improvements, which had an influence in maritime affairs; he also prepared two discourses, one on the invention of shipping, and the other on the Royal Navy and Sea-service.

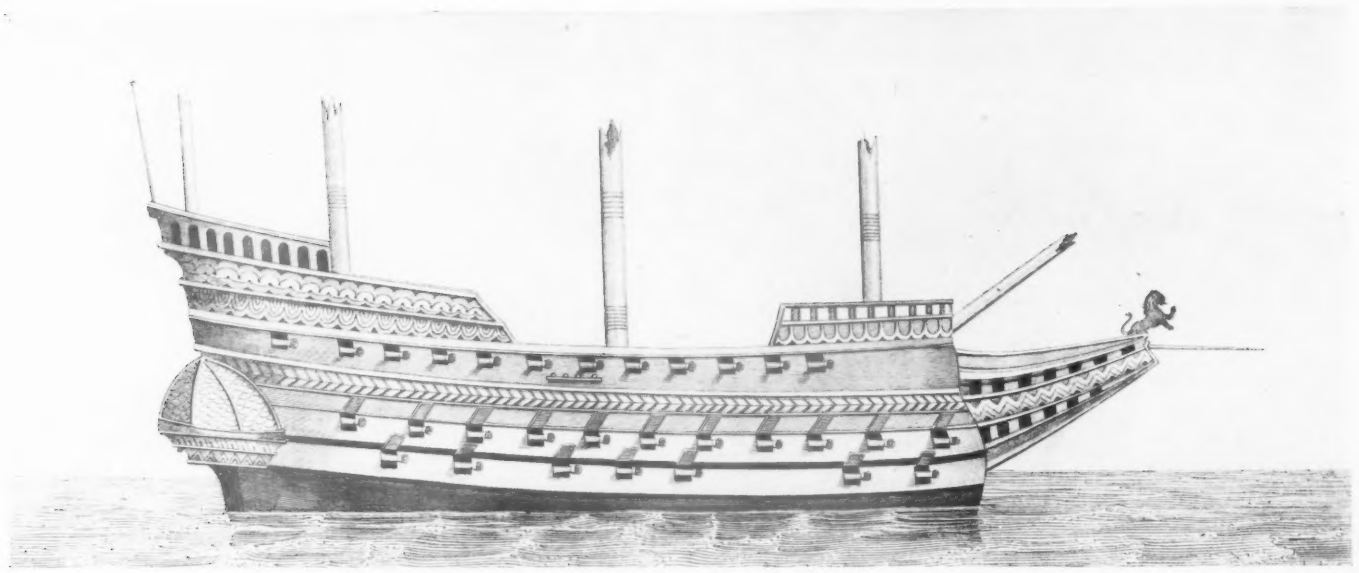
At this period the science of ship-building, or naval architecture, was deemed of national importance, and was further encouraged when James I granted a charter in 1605 to the Company of Shipwrights, wherein is set forth "the danger that had arisen to His Majesty's subjects by the practice of unskilful workmen and servants," and incorporating the shipwrights or ship-carpenters as "the Master, Warden, and Commonalty of the Art and Mystery of Shipwrights of Rotherhithe in the County of Surrey." Phineas Pett was constituted the first master, and a full list of the wardens is extant. The privileges of a new charter, granted in 1612, were very strictly defined, and referred to the admittance of apprentices, who were afterwards suffered to become masters. At the present time the company has no Hall in London, but the Council Hall originally stood on a site near Ratcliff Cross. Pepys in the Naval Minutes observes that "the Shipwrights' Hall did anciently view and approve of the draughts of ships that were to be built for the King and survey them in the building."

Here it will be convenient to introduce an account of the Pett family, whose labours did so much to advance the power and interest of the British Navy. Peter Pett is the first. He was master shipwright at Deptford from some time in the reign of Edward VI till his death in 1589. Phineas Pett was the elder son of Peter, and flourished between 1570 and 1647, becoming in turn master builder and naval commissioner in 1630. He was educated at Emmanuel College, Cambridge, appointed master shipwright at Deptford in 1605, and transferred to Woolwich two years later. His son Peter Pett, commissioner at Chatham from 1642 to 1667, was largely responsible for the efficiency of warships during the Dutch wars. Pepys makes frequent mention of Peter Pett, with whom he appears to have been on very friendly terms. The diary for August 7th notes: "In Mr. Pett's garden I eat some of the finest cherries I have eat this year, off the tree where the



HENRY VIII EMBARKING AT DOVER ON HIS VISIT TO FRANÇOIS I, MAY 31, 1520.

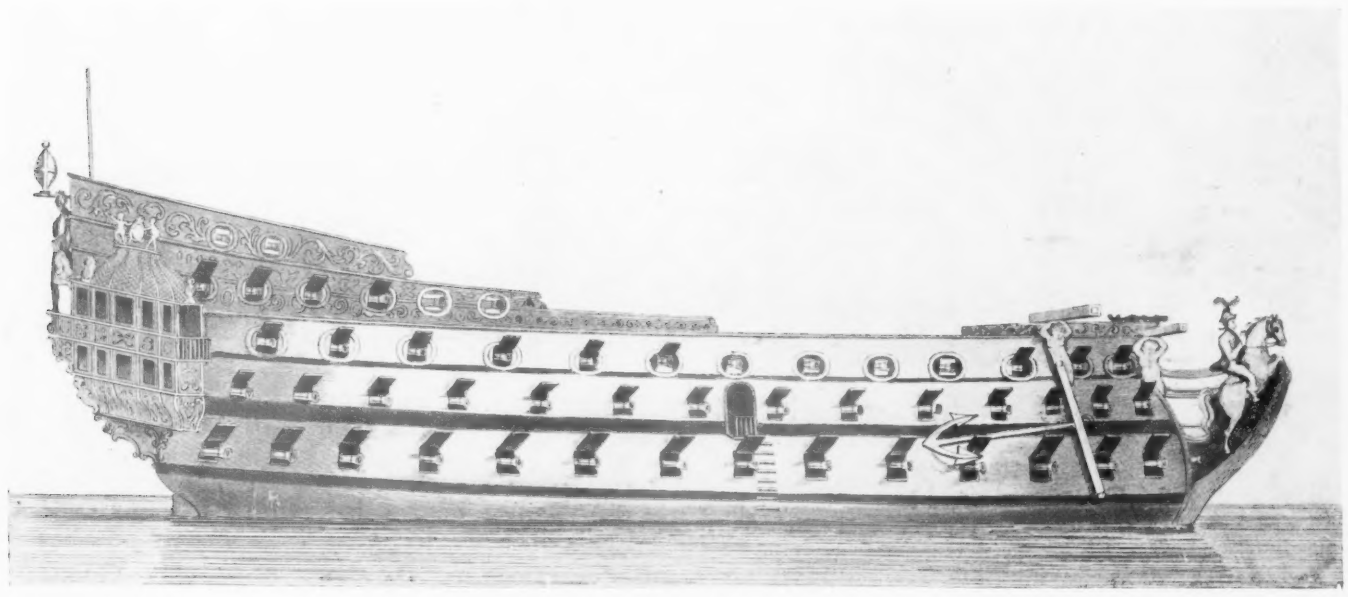
A portion of an engraving of the picture by Vandevelde at Windsor Castle.



ENGLISH MAN-OF-WAR OF THE ELIZABETHAN PERIOD.

King himself had been gathering some this morning." Four days later he writes: "To the docke at Chatham by coach, to see the *Prince* launched, which hath lain in the docke in repairing these three years: went into her, and was launched on her. By barge to St. Mary's Creeke; where Commissioner Pett, doubtful of the growing greatnesse of Portsmouth by the finding of those creekes there, do design a wett docke at no great charge, and yet no little one; he thinks towards £10,000. And the place, indeed, is likely to be a very fit place, when the King hath money to do it with." Pett's house at Rochester must have offered many attractions to the ubiquitous Secretary, for he makes frequent mention of it. From the history of that city published in 1817 a fair impression can be gathered of its internal aspect. "Beyond the Victualling Office, on the same side of the High Street at Rochester, is an old mansion, now occupied by a Mr. Morson, an attorney, which formerly belonged to the Petts, the celebrated shipbuilders. The chimneypiece in the principal room is of wood, curiously carved, the upper part being divided into compartments by caryatides. The central compartment contains the family arms, viz.: Or, on a fesse gu., between three pellets, a lion passant gardant of the field. On the back of the grate is a cast of Neptune, standing erect in his car, with Tritons blowing conches, &c., and the date is 1650."

Peter Pett fell from his high estate and was superseded in 1667, a fact due to the invasion of the Thames by the Dutch fleet; a national disgrace aptly described by the architect, Sir John Denham, in the "Advice to a Painter." Pett was committed to the Tower on June 17th and on the 19th appeared before the "Council-board" to answer the charges, "chiefly the not carrying away of the great ships, and the using of the boats in carrying away his goods," to which, according to Pepys, "he answered very sillily, though his faults to me seem only great omissions. He said he used never a boat till they were all gone but one; and that was to carry away things of great value, and these were his models of ships; which, when the Council, some of them, had said they wished the Dutch had had them instead of the King's ships, he answered, he did



THE "ROYAL CHARLES," BUILT IN 1673.

believe the Dutch would have made more advantage of the models than of the ships, and that the King had had greater loss thereby: this they all laughed at."

Pett was in consequence made a scapegoat, as Marvell's satire confirms (Vol. iii, page 390):—

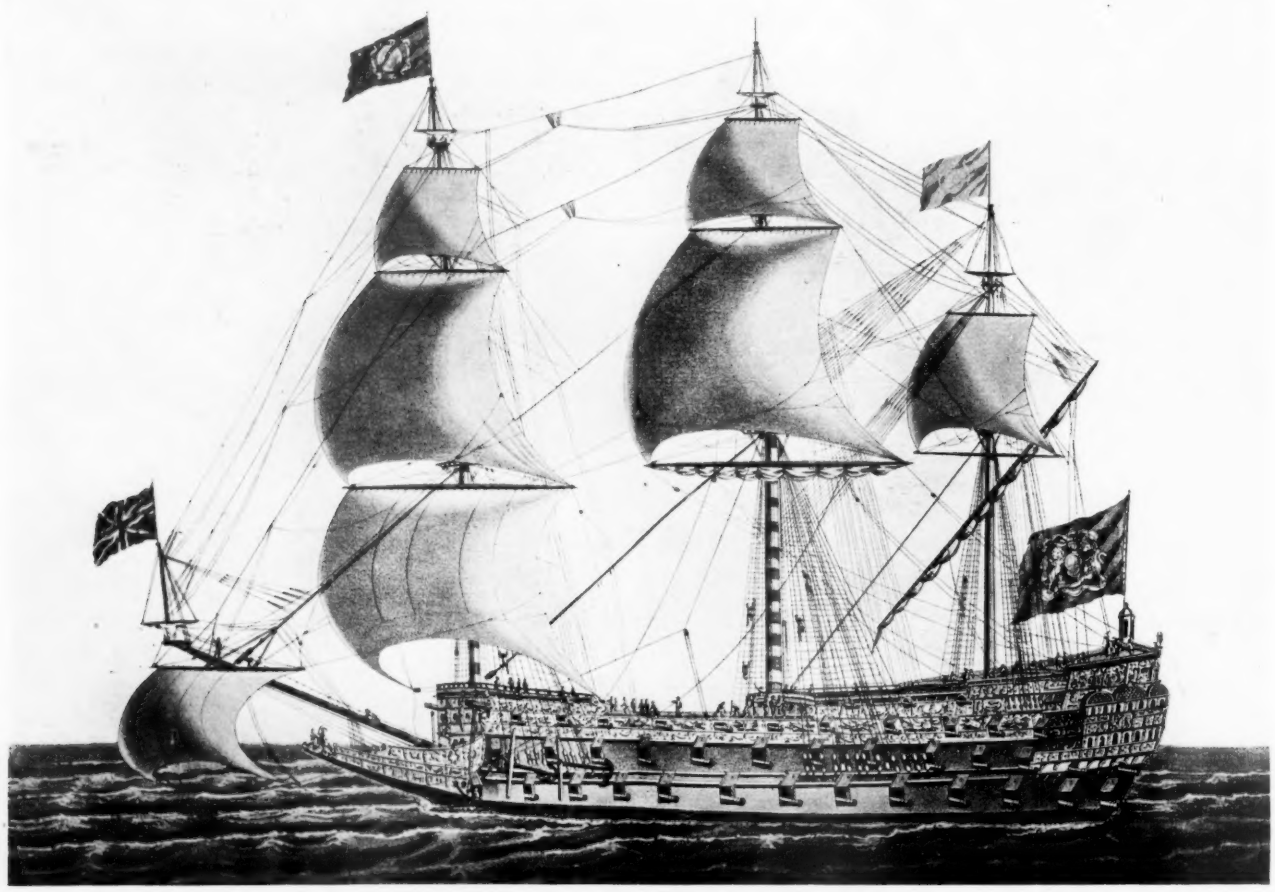
> After this loss, to relish discontent
> Some one must be accused by Parliament;
> All our miscarriages on *Pett* must fall,
> His name alone seems fit to answer all.

Notwithstanding the calamity, Peter Pett was the foremost shipbuilder of his time, and did much to raise the art of naval architecture.

Continuing the account of shipbuilding in the early part of the seventeenth century, we come to the period when the imposition of ship money under Charles I produced means for furnishing the Navy with capital ships. In 1635 Phineas Pett was instructed by the King to begin the *Royal Sovereign*, a vessel of beautiful lines and superior to any that had been built in English yards (see Plate I). She was launched at Woolwich in October 1637. The shipwright in his journal says: "She was so gorgeously ornamented with carving and gilding, that she seemed to have been designed rather for a vain display of magnificence than for the service of the State." A rather faulty description was drawn up at the time by Thomas Heywood, who described the principal ornaments, and added "that all those works were gilded quite over, and no other colours but gold and black to be seen about her." This ship was remarkable for her durability, for after undergoing considerable alteration she was constantly employed in the wars of Cromwell and Charles II. She was eventually laid up at Chatham in order to be rebuilt. After she had been made a deck lower and strengthened, she became so formidable that no enemy ship would willingly lie by her side. In the action at Cape La Hogue this ship, then nearly sixty years old, chased and put out of action two of the French King's crack ships, namely, the *Wonder of the World* and the *Soleil Royal*. But the stout fighter was at last burnt through negligence at Chatham, in 1696. The *Royal Sovereign* was the first three-decker built in England. She formed the subject of a picture painted by Vandevelde.

With the outbreak of the Civil War the possession of the Navy became of first importance, and the Parliament by a bold stroke got the fleet of fifty ships under their own control. In 1649 the Earl of Warwick was superseded in command by Blake, Deane, and Popham jointly, or by any two of them; two years later the appointment was renewed, and in 1652 Blake was appointed "sole general of the fleet for nine months." During 1653 the number of warships in the Navy was increased with rapidity—a fact noted by Evelyn, who went to see a ship, on April 9th, 1655, probably the *Fairfax*. He writes: "I went to see the great ship newly built by the usurper, Oliver, carrying ninety-six brass guns, and 1,000 tons burthen. In the prow was Oliver on horseback trampling six nations under foot—a Scot, an Irishman, Dutchman, Frenchman, Spaniard, and English, as was easily made out by their several habits. A Fame held a laurel over his insulting head; the word, God with us."

Under the Protectorate the Navy was well managed, and at the death of Cromwell it consisted of 157 ships, several of the finest having been built since the termination of the war with Holland; forty were foreign ships, mostly taken in the Dutch war. The Navy played no unimportant part in the



THE "ROYAL SOVEREIGN" (OR "SOVEREIGN OF THE SEAS"), BUILT 1637.

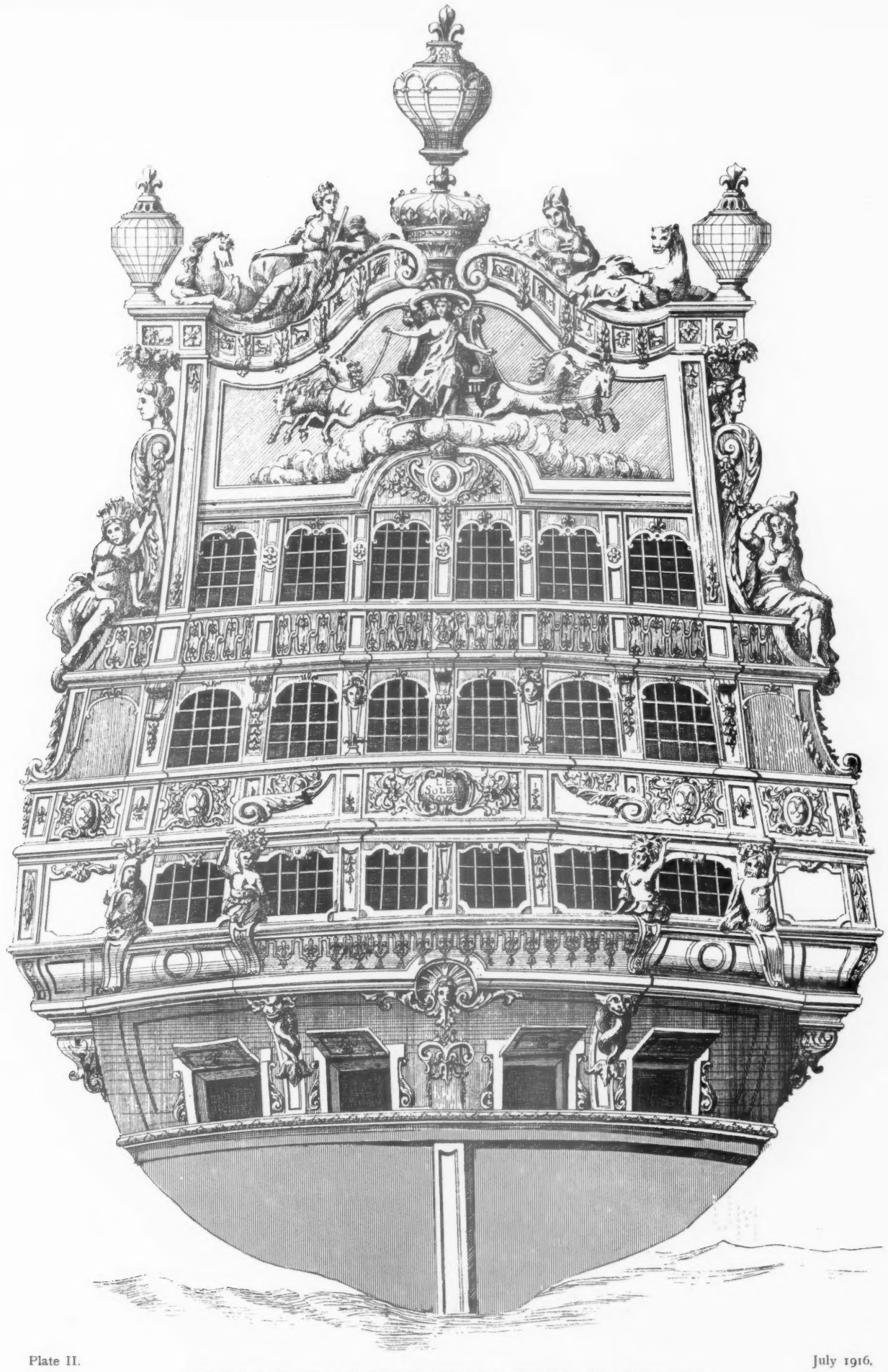


Plate II. July 1916.

THE STERN OF "LE SOLEIL ROYAL" (PERIOD OF LOUIS XIV).

After a design by Puget.

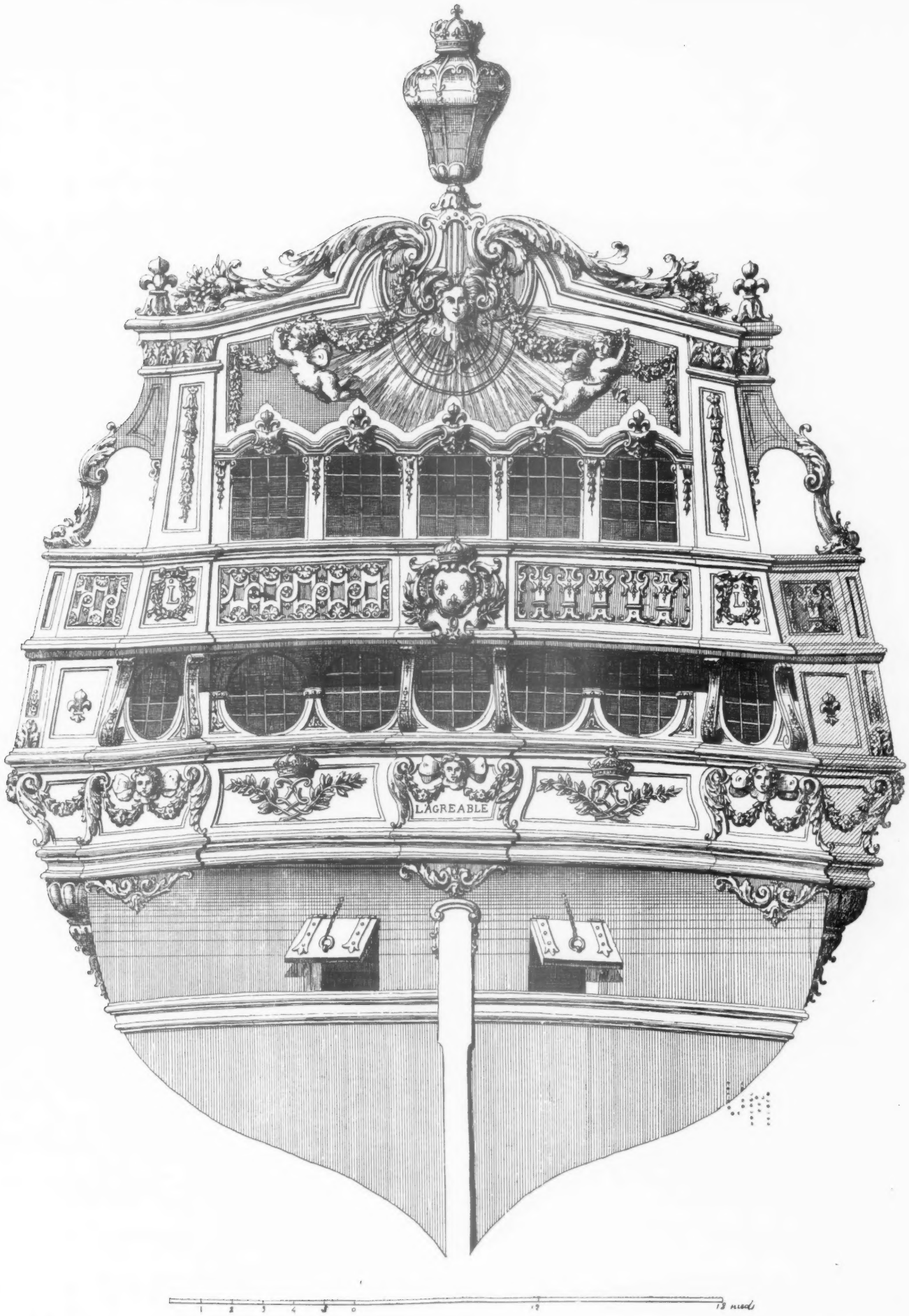


Plate III

July 1916

THE STERN OF "L'AGRÉABLE" (A THIRD-RATER OF THE LOUIS XIV PERIOD).

After a contemporary design.

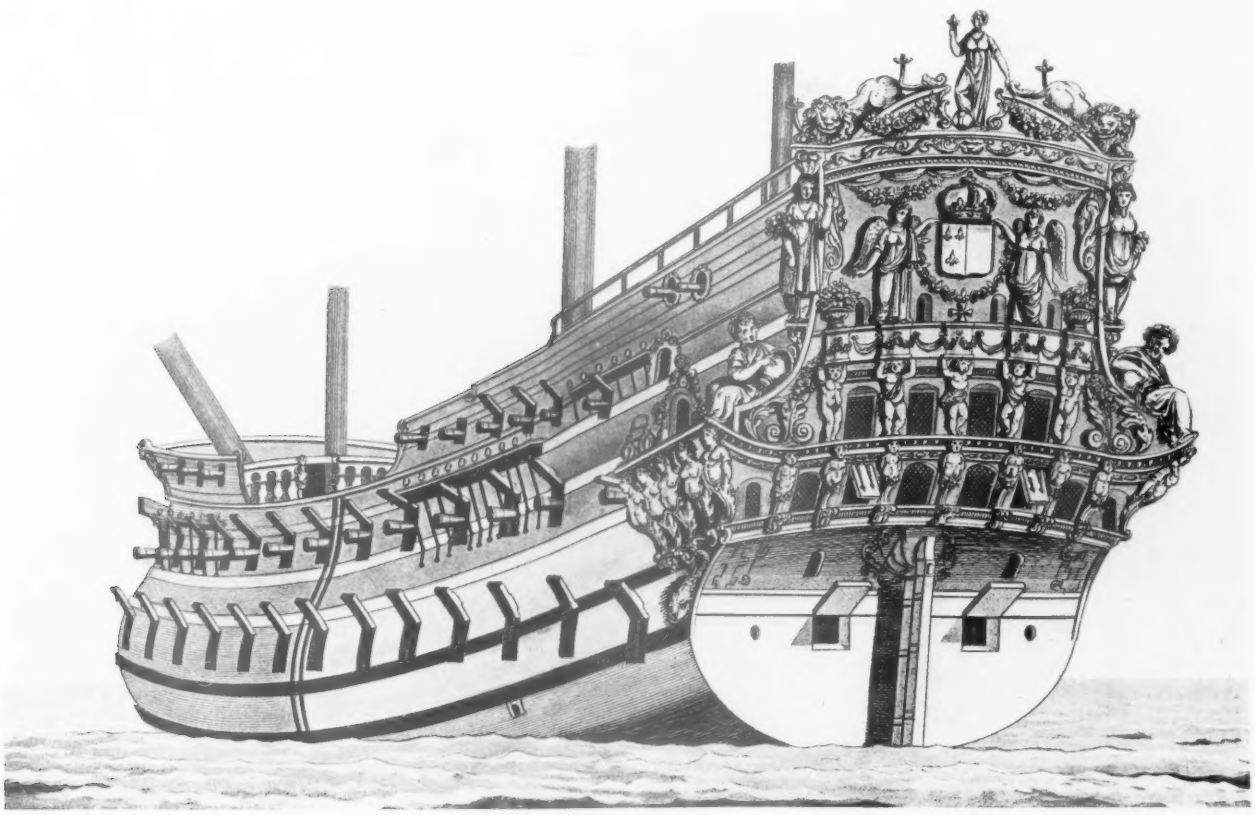
Restoration, and Charles II pledged himself to pay particular regard to its interests.

Some years after Pett had been driven from his post as commissioner, Sir Anthony Deane, another friend of Pepys, who had been master shipwright at Harwich in 1664, was appointed to the position. He was a very capable designer, and built yachts for Louis XIV, besides inventing the "Punchinello" cannon; he died in 1721. Evelyn, under the date January 28th, 1690, says: "Mr. Pepys, late Secretary to the Admiralty, showed me a large folio containing the whole mechanic part and art of building royal ships and men-of-war, made by Sir Anthony Dean, being so accurate a piece from the very keel to the lead block, rigging, guns, and victualling, manning, and even to every individual pin and nail, in a method so astonishing and curious, with a draught, both geometrical and in perspective, and several sections, that I do not think the world can show the like. I esteem this book as an extraordinary jewel."

Deane made Pepys a welcome present of a model ship, which is duly recorded by the diarist. "Home, where I find Mr. Deane of Woolwich hath sent me the modell he had promised me; but it so far exceeds my expectation, that I am sorry almost he should have made such a present to no greater a person, but I am exceedingly glad of it, and shall study to do him a courtesy for it."

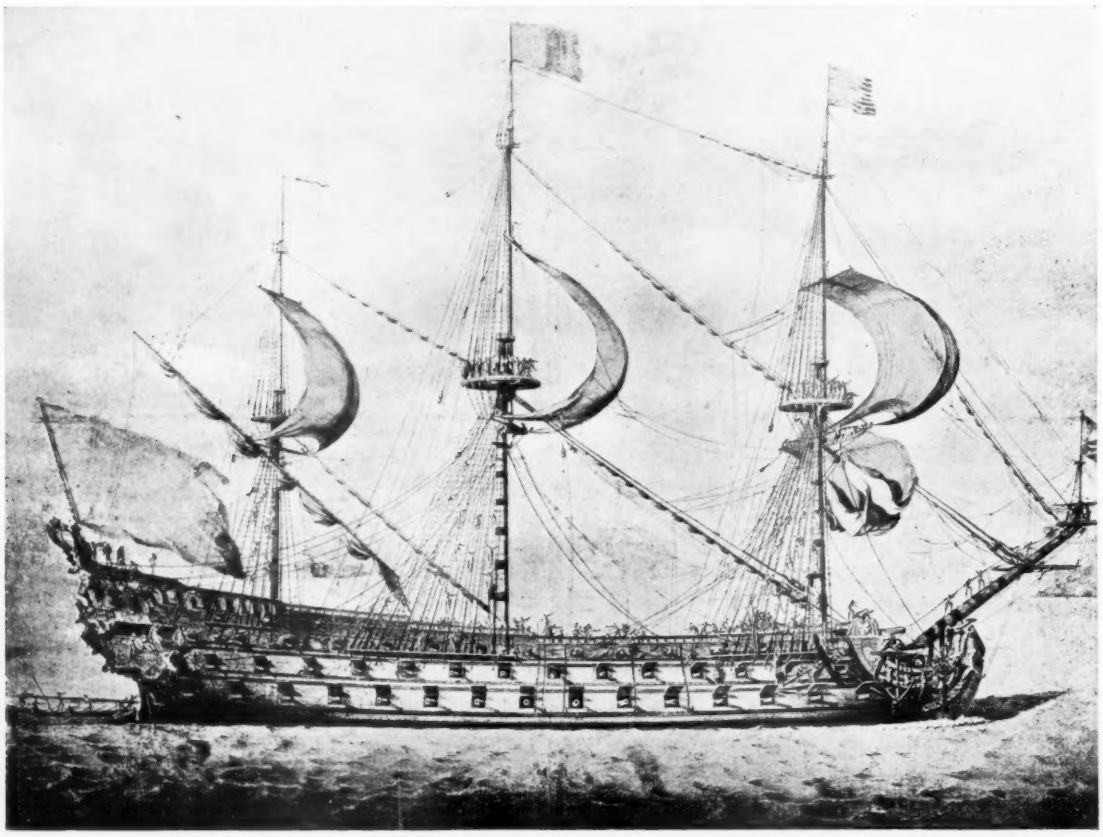
While the power of the Navy was being consolidated under the auspices of Charles II, the French were becoming serious rivals on the other side of the Channel. They began to construct a fleet in the time of Richelieu, but it was left to Colbert to perfect it, and thereby strengthen the hands of his royal master on the seas. The ships which the French sent to assist the English against the Dutch were of large size and superbly designed, carrying from sixty to seventy-four guns on two decks. The King and the Duke of York went on board them as they lay at Spithead, and were so impressed, especially with the *Superbe*, that Sir Anthony Deane was ordered to build the *Harwich* as near to her dimensions as he could. Pepys states: "From the plan of this ship nine others were ordered by Act of Parliament to be built." The *Royal Charles*, built in 1673 by "Shish, a plain honest carpenter, master builder at Deptford" (see illustration on page 3), shows what an advance was made both in the direction of seaworthy qualities and graceful dignity. At this period the magnificent carved decoration at the stern, as well as the gilding and paintwork on the outside of the bulwarks, running in some instances for the whole length of each topside, was at its best. In every convenient space panels were grouped representing trophies of arms, gods, nymphs, and sea monsters. Both Pepys and Evelyn appear to have had little sympathy for decoration applied too profusely. One of the notes in Pepys's diary states how he inspected the *Ruby*, a French prize, "the only ship of war taken from any of our enemies this year. It seems a very good ship but with galleries quite round the sterne, to walk in as a balcone, which will have to be taken down."

On March 7th, 1690, Evelyn, Pepys, and Sir Arthur Deane met at dinner, and started a discussion on the state of the Navy after the Revolution. Sir Anthony Deane advocated the building of fast-sailing frigates in lieu of "huge great ships, and second and third rates, with high decks, which were for nothing but to gratify gentlemen commanders, who must have all their effeminate accommodations, and for pomp." It is a strange coincidence that at the period these three Englishmen were discussing the, from their point of view, unnecessary decoration of ships, a remarkable man-of-war, with superb embellishments, was being launched in France. This ship was the celebrated *Soleil Royal*, one of the chief units of



FRENCH SECOND-RATER OF THE 1670 PERIOD.

Louis XIV's new fleet which surpassed the English ships both as regards numbers and sailing qualities. In the Naval Museum at the Louvre there is an excellent model of this unfortunate vessel, which was destroyed by Admiral Russell in the great action off Cape La Hogue. A fine drawing showing the decoration of the stern is reproduced on Plate II. An interesting fact in connection with the *Soleil Royal* is that the decorative parts of the ship were designed by the celebrated architect and sculptor, Pierre Puget, who in his early days had worked under a carver and shipbuilder of Marseilles before he left to study architecture in Italy and to work as pupil under Cortona. The year 1643 saw Puget back at Marseilles busily designing a magnificent ship for Anne of Austria; a painting of this vessel is here reproduced. Fouquet sent the architect to Genoa to select marble for his works, but when Colbert rose to



DESIGN FOR FRENCH MAN-OF-WAR BY PUGET, 1650.

office he recalled Puget, possibly for reasons connected with the decoration of the ships projected by Louis XIV for the conquest of Europe. In the midst of other labours Puget managed to visit London and design the second Montagu House for Ralph, first Duke of Montagu. Puget was without doubt a great artist, but whether he was entitled to be styled the Michelangelo of France, for ability in three arts, is open to question. It would, however, be difficult even in the whole length and breadth of France to find a more enchanting design than that by Pierre Puget for the stern of the *Soleil Royal;* from the crown at the centre of the scrolled taffrail to the carved moulding above the rudder, the work expresses the spirit of the sea. There is a charm about this design which is difficult to elucidate; the three-storeyed range of sashed windows, reminiscent of a house-front of the time—perhaps in the artist's native town—the graceful curves of the balconies, each enriched by blind balustrades, the tasteful ramps and consoles acting as quarter-pieces and completing the side walks, even the large carved panel symbolising the Chariot of the Sun, are attributes inferior only to the broad sense of design which decreed their positions against the naked timbers made ready by the master shipwright. Whoever designed the sheer plan of this ship must have experienced a thrill of pleasure when Puget unrolled his sketches for the finishings.

Another fine design is that of the stern of *l'Agréable* (see Plate III), a third-rater of the time, in which Baroque tendency is just as expressive, within its limitations, as in the design for the more ambitious vessel. And the same character of Baroque architecture applied to the embellishment of ships is seen in the illustration on the preceding page showing a French second-rater of 1670, the original being supposed to have been made after a drawing by Vandevelde.

In the seventeenth century there was a strong resemblance between the timber house-fronts and the sterns of ships, both showing a wealth of carved decoration. This important branch of craftsmanship rose to its zenith in the reign of William and Mary, and was reflected in the doorways of the later Wren period; but with the gradual decline of ship-carving the demand for ornamental doorcases in wood was diminished, partly owing to the scarcity of expert carvers and the introduction of Italian plasterworkers. At the beginning of the reign of George III there were at least three hundred ship-carvers employed on both banks of the Thames below London Bridge, but at the time of the Regency there were not more than fourteen, including three master firms, namely, H. White of King's Stairs, Rotherhithe; Greyfoot and Overton; and the Pageants of Rotherhithe.

A. E. R.

(To be concluded.)

RECENT DECORATION AT THE ROMAN CATHOLIC CATHEDRAL, WESTMINSTER.

By W. CURTIS GREEN, F.R.I.B.A.

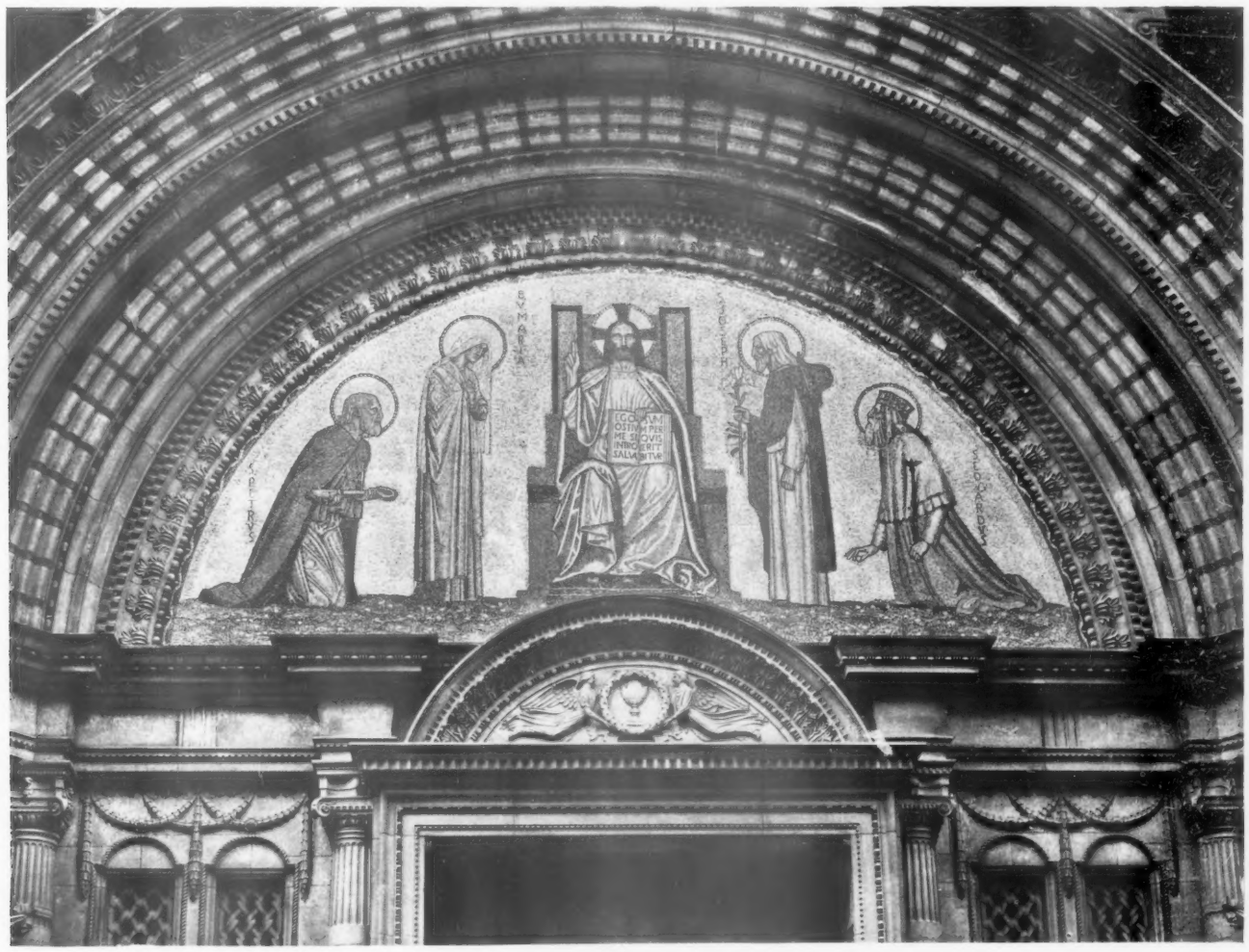
THOSE who visit the Roman Catholic Cathedral at Westminster will notice that the decoration of the building goes quietly forward. Three new works are now to be seen; one, the Stations of the Cross on the great piers of the nave, is yet incomplete; the others, the Chapel of St. Andrew and the Saints of Scotland in the south aisle, and the picture in the tympanum of the west door, are quite recently finished. The last will naturally be the first to be noticed; for fourteen years or more the bare brick tympanum over this great doorway has been waiting to receive the decoration its designer intended and the importance of its position demands.

Externally Bentley's great building is a compromise; he seemed to realise this when some sixteen years ago he described to the writer his conception of a Metropolitan Church as a plain shell with a beautiful interior: with intention he shaped the great brick pile with its concrete roofs. Every country and every age has contributed something to the making of the exterior of the shell, from the early Christian art of the Greek craftsmen to the modern English of Philip Webb, and from all the centuries between.

Bentley knew that no general view of the exterior could be compassed; the west front, somewhat small in its parts, can only be seen from a few yards away; of necessity the vertical planes of the composition are broken up by setting back in receding stages to overcome the objections of building owners with dominant rights of light across the road. The centre piece of the front is the great doorway, forty feet wide; the archivolt encloses the tympanum now decorated by Mr. Anning Bell, of which an illustration is given below.

Bentley saw that here was the place to strike the keynote of what was to follow. The idea of using mosaic in this position was his; it is a pretty idea that a glimpse of the lining should be visible from outside, a hint that, like the "king's daughter," the Cathedral "is all glorious within"; had this glimpse suggested "wrought gold" the result might have been more successful. Mr. Bell shall speak for himself:—

"In the first place, of course, the figures and their relative positions were settled by the Cathedral authorities."—There are five figures. The central group represents God the Son, attended by the Virgin Mary and St. Joseph—Christ enthroned and crowned by the cruciform nimbus, in the act of benediction; on the left of the panel is St. Peter, and on the right St. Edward the Confessor.—"Then the question of the background was the next thing to be considered. I decided against



MOSAIC PICTURE IN TYMPANUM OVER MAIN ENTRANCE TO WESTMINSTER CATHEDRAL.
By R. Anning Bell.

a gold ground at once. Gold is not suitable to this climate, owing to the danger of the tesserae being more liable to injury by frost than those of other colours. Also I do not think a flat mass of gold out of doors is agreeable. Then it was a question of light figures against a dark ground—for example, blue—or a light background relieving darker figures. This latter I decided upon, as the silhouettes of the figures would always remain distinct, however discoloured and dim the background or the treatment of details on the figures might become. It might be said that light figures against a dark ground should also tell in the same way as simple forms, in spite of the accretion of dirt. But, on further consideration, it will be seen that the necessary shading, however simple, would naturally be at the edges of forms, and so tend to merge in time into the ground. I therefore relieved the figures against a very light ground, but I confidently expect that in not many years the tone of it will be very much lowered, and that any excess of contrast which may be felt at present by the critical will have disappeared.

"As to the general treatment of the subject, the scale of the figures gave occasion for much thought. I finally came to the conclusion that in relation to the general look of the front of the building—the width of the over-arching mouldings round the tympanum, and, particularly, the size of the lettering in the large panel above it—I would not have the figures smaller than I have made them, whilst the size of the tympanum itself prevented them from being bigger without looking crammed in.

"The colour is quiet and sober; the greys and browns of which it is largely composed will, I hope, go well with the colour of the stonework around, whilst the red and pink is meant to carry out the brickwork: in fact, the colour is an attempt to slightly emphasise or focus the general colour of the building rather than to contrast with it. Time will doubtless dim it down very much. Blue is sometimes at any rate seen in the sky above, and green in the trees, flowers, etc., round about the Cathedral. The green in the mosaic is mostly hidden by the projecting cornice below, but I felt that rather a clean green was necessary.

"The background is set strongly in cement, and the whole of the tesserae are embedded in it, as well as those in the figures in thin 'putty' (which is of different composition), so that there is as little chance as possible of water settling in the crevices and injuring the work by freezing in cold weather. This treatment also may keep the surface a little cleaner looking as a whole; but, of course, it has been necessary to sacrifice the texture which is sometimes valuable in interior work.

"I have endeavoured in the whole thing to be reticent and severe, and to avoid any sort of extravagance or showing off of personal whims or fantasy. In such a subject, and in such a place, the personality of the artist should not, I think, be obtrusive."

Pleasing as is Mr. Anning Bell's design in itself, most people will probably feel that the white background to a panel in a deeply-recessed space is unfortunate; in the writer's opinion it

ST. ANDREW'S CHAPEL: THE STALLS.
By Ernest Gimson.

Plate IV. July 1916.

CHAPEL OF ST. ANDREW AND THE SAINTS OF SCOTLAND, WESTMINSTER CATHEDRAL.

Robert S. Weir, Architect.

Plate V. July 1916.

CHAPEL OF ST. ANDREW AND THE SAINTS OF SCOTLAND, WESTMINSTER CATHEDRAL.

Robert S. Weir, Architect.

would be wrong either surrounded by marble or with further colour and gold; against the bare, dark, coarse stone and brick the white is a capital error. Presently the great teak doors below are to be sheathed in bronze, and this fact might have suggested the right colour note for the background of the panel above.

If, while outside the Cathedral, the mind is still critical and unsatisfied, conscious of problems and contradictions that appear to cumber the progress of art in our time, on entering the impression changes, rising to a serener level.

Every age has produced masterpieces in one or more of the arts; none can have been without its share of mediocrity that in the present seems so overwhelming. Stevenson points the difference between the ephemeral and the permanent when he says: "A dogma learned is only a new error—the old one was perhaps as good—but a spirit communicated is a perpetual possession." Architects, like theologians, while seeking freedom and power through mastering the law, have oftentimes been mastered by it; not so Bentley, who won through to liberty and independence, retaining a love for ideas and for perfected skill; the interior of his Cathedral in its unfinished state breathes the spirit of perfection, of a fine art matured slowly, which time will ratify.

CARVED PANEL ON PIER.

To find this refreshment and inspiration in a contemporary work is to discover "a perpetual possession." There is one quality that makes the pleasure it gives all the more piquant—its unfinished state. Some people cannot enjoy it for the uncertainty of what will be done with it. How far is it possible to enhance or diminish the appeal of this fine conception? How far will the sense of blue space, now so noticeable and so captivating in the bare building, be caught and retained when the decoration is complete? How will the daylight tell and how the scale? Will the acoustics be as good as they are now? In fact, will the gain compensate for what will be lost?

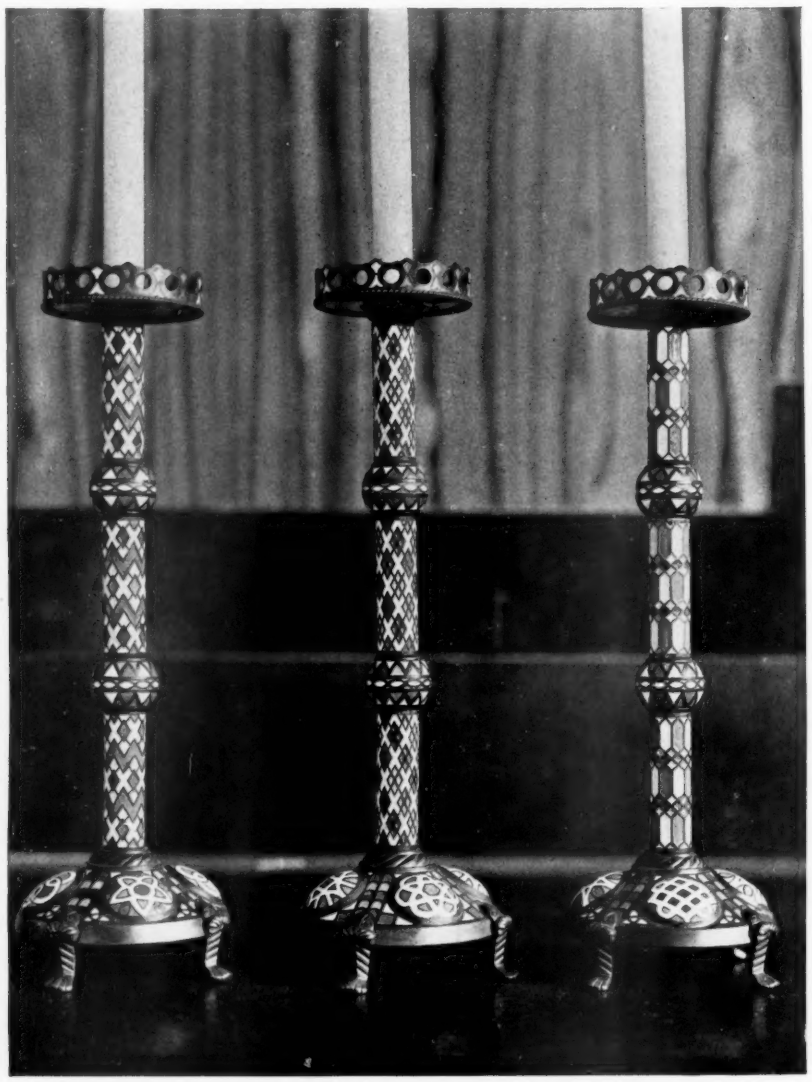
ST. ANDREW'S CHAPEL: DETAIL OF MOSAIC ON LOWER PORTION OF VAULT OVER WINDOWS.

Cartoon prepared by George Jack: Mosaic executed under direction of Gaetano Meo.

At present the interior stands vast and bare; the nave, sixty feet wide, double that of the Abbey, is dominated by a wood Crucifixion in gold and colour thirty feet high, suspended as a holy rood. The effect is one of those accidents of genius, an over-emphasis of art, that, aided perhaps by incense and music, and by the distant gleam of precious materials and cunning craftsmanship seen here and there in the aisles or choir, is mysterious and romantic.

There are those who cry out for this or that treatment of this interior. They try to read their own theories into Bentley's scheme of decoration, or as much of his scheme as they have grasped. How much of his plans were completed at his death does not matter; marble plating has to cover the walls so high from the floor, and a vast scheme of iconography above, a blaze of coloured mosaic in green and red and gold fading into blue as it receded; it is not essential that the author should instruct the illustrator of the story. The building as Bentley left it is complete in itself; in it is sufficient evidence of the spirit the author wished to communicate; and what a fortunate thing is this for modern art and modern craftsmen to have so fair a field for their labours and rewards! The setting will condemn anything but lasting merit; like all big things, it is primitive, and work of a standard below the level of the original will be as conspicuous as is vice beside virtue.

There is no sign that the authorities have not realised the nature and importance of their opportunity and responsibility; on the contrary they have shown courage and sympathy in administering their trust, and have employed artists and craftsmen of genuine ability; they are not, perhaps, like their father in God, infallible, and mistakes will occur. The essential thing is not that there should be no errors, but that the art be live art, the best of the time. The fatal thing is to fall back to the ecclesiastical trade trimmings beloved of the thoughtless alike in the Roman as in the English Church. Mistakes are less likely to occur as experience is gained.



ST. ANDREW'S CHAPEL: ALTAR CANDLESTICKS.

By Harold Stabler.

Those who are fearful for the future of the Cathedral should view the recently finished Chapel of St. Andrew and the Saints of Scotland; it is the most successful of the decorations yet undertaken. The donor, the Marquess of Bute, is to be congratulated on the beauty of his gift; he has done more than decorate an unfinished chapel of his church; he has set up a standard of excellence in the decoration of the Cathedral,

and has placed under a debt of gratitude all those who care about art and who would maintain the best traditions of craftsmanship.

The architect to whom the work was entrusted, Mr. Robert S. Weir, while an acknowledged authority on Byzantine art, is also a master of modern building, and intimately associated with all that is best in English craftsmanship and design. Under the guidance and direction of Mr. Weir, the most talented craftsmen of the day have wrought in precious materials a suitable lining to one of the little side chapels of

chronological order. The use of lettering is indeed a pleasant feature of the decoration.

The windows on the right, not shown in the views, are lined with Pentelic and Pavonazzo; the shafts at the side, with spiral flutings, are of Levanto, and their responds of Giallo Antico. The marble sheathing sets off the gold and coloured mosaic above, a charming feature of which is the golden vault, the tesseræ arranged in repeating fan-like patterns. The mosaic in particular is of an excellence unsurpassed both in design and execution; the six cities connected with the life of

ST. ANDREW'S CHAPEL: MARBLE PANELS BESIDE THE ALTAR.

By Stirling Lee.

Bentley's Cathedral. Some illustrations of the work are here shown. The views on Plates IV and V show but indifferently well "the pavement like the sea" to commemorate St. Andrew the fisherman who rowed our Lord on the lake of Galilee; the centre space of Brescia marble is surrounded by Verde Antico, with a border of sea-green Iona marble, in which fishes are inlaid. The wall linings to the springing of the arches of the aisle arcade are of various marbles—blue Hymettean, white Pentelic, old Cipollino, and red Skyros; on the blue slabs of the high dado are incised the names of Scottish saints in

St. Andrew—Constantinople, Bethsaida, and Patras on the one side, and Amalfi, Milan, and St. Andrews on the other, filling the spandrels of the vault, drawn by Mr. George Jack—are an original and entirely successful piece of work. Mr. Meo and his fellow workers are to be congratulated on the high level of their achievement.

The central feature of the chapel is the altar, a slab of dark Alloa granite supported on five pillars of red Peterhead granite, placed beneath a baldachino of Verde Antico columns with bronze bases and caps and a canopy of

Pentelic. In the panel on the altar is a figure of Christ the Intercessor, in beaten copper; this and the adjoining low-relief figure panels are the work of Mr. Stirling Lee; the altar candlesticks and reliquary are enamelled metal, worked by Mr. Harold Stabler.

The west end of the chapel is furnished by the row of seven ebony stalls inlaid with ivory, of singularly fine design, considered singly, or collectively in relation to their position, the work of Mr. Ernest Gimson.

The chapel is separated from the church by white metal open-work screens of great size and beauty; they not only protect the chapel, but attract the passer-by to view more nearly the treasure they enclose.

Like all good work, its perfection pervades one slowly. The merit of the design and the fineness of the workmanship in many crafts seem to reach the highest level of this kind of achievement, and in viewing the chapel one recalls a saying of Anatole France: "There is nothing precious save the work of men's hands, when God gives it His countenance."

The Stations of the Cross, the work of Mr. Eric Gill, have been the subject of some controversy. At present seven of them are carved and in position; three of them are here illustrated. There are those who object to the carved treatment; they would prefer *opus sectile*. That is a matter of taste; either treatment is legitimate, and there is abundant justification for that chosen. The panels are very large, perhaps five or six feet square; they are treated in low relief in the highly primitive manner of genuine Byzantine carvings. For the most part they are pleasing as to pattern, and tentative efforts have been made to strengthen the design by the application of colour to the marble. The first, "Jesus is condemned to death," is a noble panel alike in design and execution; the second, "Jesus receives his Cross," is an excellent composition, but the figure of Jesus appears to the writer devoid of both grace and dignity; three and four are "Jesus falls the first time," and "Jesus meets his Mother"; the fifth, "Simon of Cyrene helps Jesus to carry the Cross," is powerful and well composed. Ten and thirteen are the only others yet fixed; these show a marked decline in quality; the Deposition is grotesque, and perilously near ludicrous; and it is greatly to be hoped that when the remaining panels are in place the scoffers will have no reinforcement for their expostulations.

Whether or not one likes the Stations of the Cross, the work is extraordinarily able and vital; compare them, for instance, with the carved and inlaid pulpit from Rome standing unhappily against one of the piers of the nave close by. Mr. Gill's work, indeed, affected as it is, is instinct with life, whereas the other is lifeless and insipid.

THREE OF THE STATIONS OF THE CROSS.

By Eric Gill.

CURRENT ARCHITECTURE.

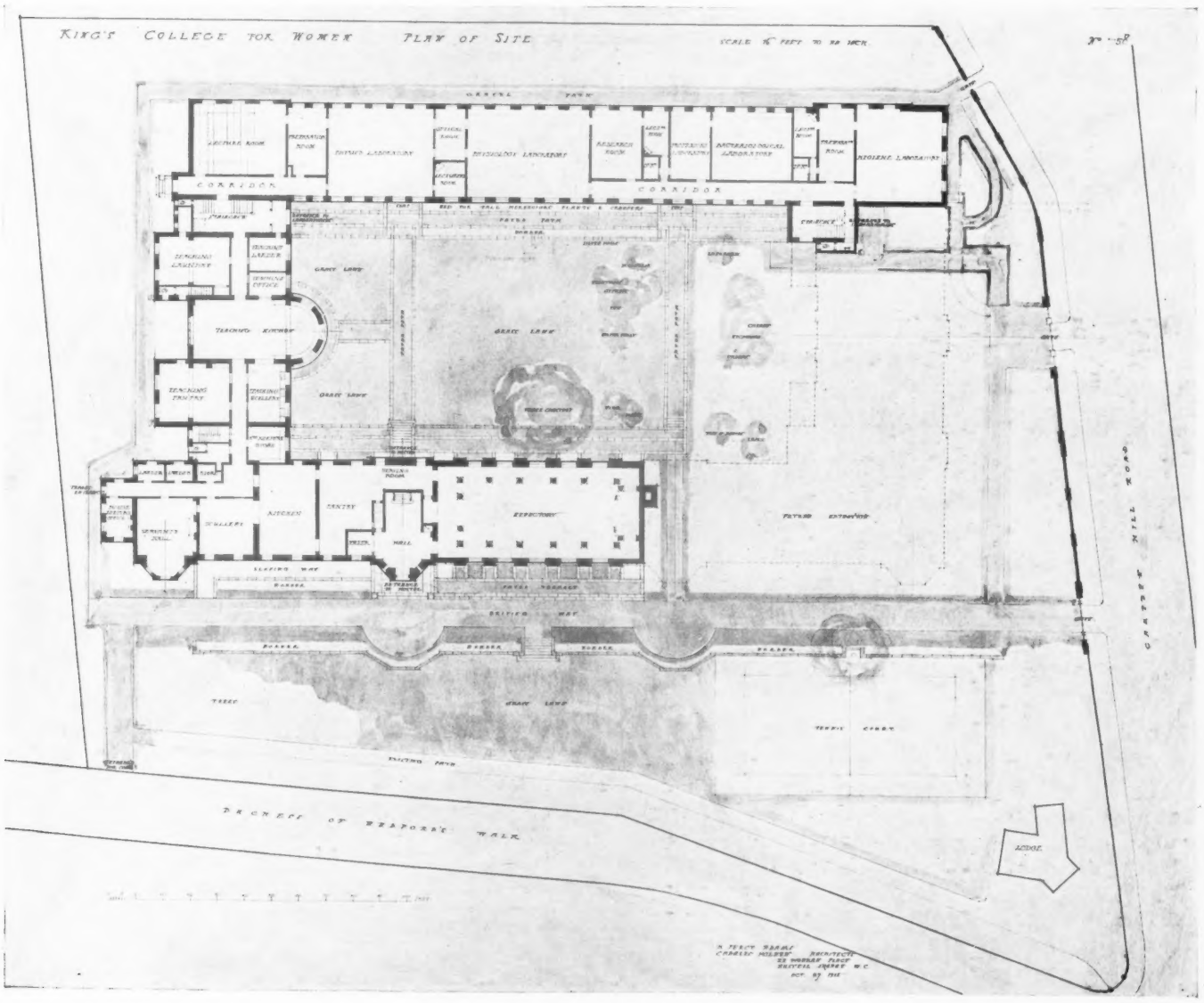
KING'S COLLEGE FOR WOMEN.

KING'S COLLEGE for Women (University of London) is now established in an admirably designed and excellently equipped new building at Campden Hill, Kensington, the architects for which are Messrs. H. Percy Adams and Charles Holden. We reproduce a series of specially-taken photographs of the building, but before dealing with these from the architectural standpoint it is necessary to set down the particular aims of the institution—the latest development of a work begun eight years ago, when courses in domestic and social science were instituted by King's College for Women, with a view to providing education in science and economics of a University standard, and applying the principles thus taught to the management of the home and of young children, to the hygienic and businesslike conduct of institutions, to the laws and economic conditions affecting the employment of women in factories and workshops, etc.

The lectures given are expressly adapted to the needs of women wishing to prepare themselves for the efficient management of their own homes, and for stimulating that interest which knowledge and thought can develop in those subjects with which all women are more or less concerned, whatever their other purposes may be. The training also fits them for posts as teachers, and for other spheres both professional and voluntary, including inspection, work on district councils and other public bodies, and especially for housekeeping on a large scale. There are also many openings connected with the interests of public health, the demand for trained social workers in connection with which is constantly increasing.

The grouping of studies within the courses now includes (three years' course) biology, chemistry, physics, hygiene, physiology, household work (cookery, laundry, and housewifery), economics (including a short course in book-keeping and business affairs), ethics, and psychology. Thus it will be seen that this is an endeavour to treat all subjects connected with the household both scientifically and practically, and in every case to link up the practical arts with the scientific principles on which they are based.

This movement is thoroughly in accord with what may be called the ethics of knowledge in our own day—with the realisation of our responsibility in applying knowledge, wherever



possible, to practice. The application of science to household matters is only the natural outcome of an appreciation of the benefits which have accrued in all other departments of life where science has been introduced; and the introduction of a domestic science course into a University, though regarded by some as a revolutionary step, is no more so than was the inclusion of agricultural and engineering courses into the curriculum for men—an innovation that has already justified itself.

The organisation of these courses is the outcome of a strong wave of public opinion which has recently become aware of the danger arising from the prevalent ignorance of such matters as economic household management, hygiene, and child-rearing; and it may be regarded as the special contribution made by women in recognition of the necessity for specialisation in order to attain to a high standard of national efficiency.

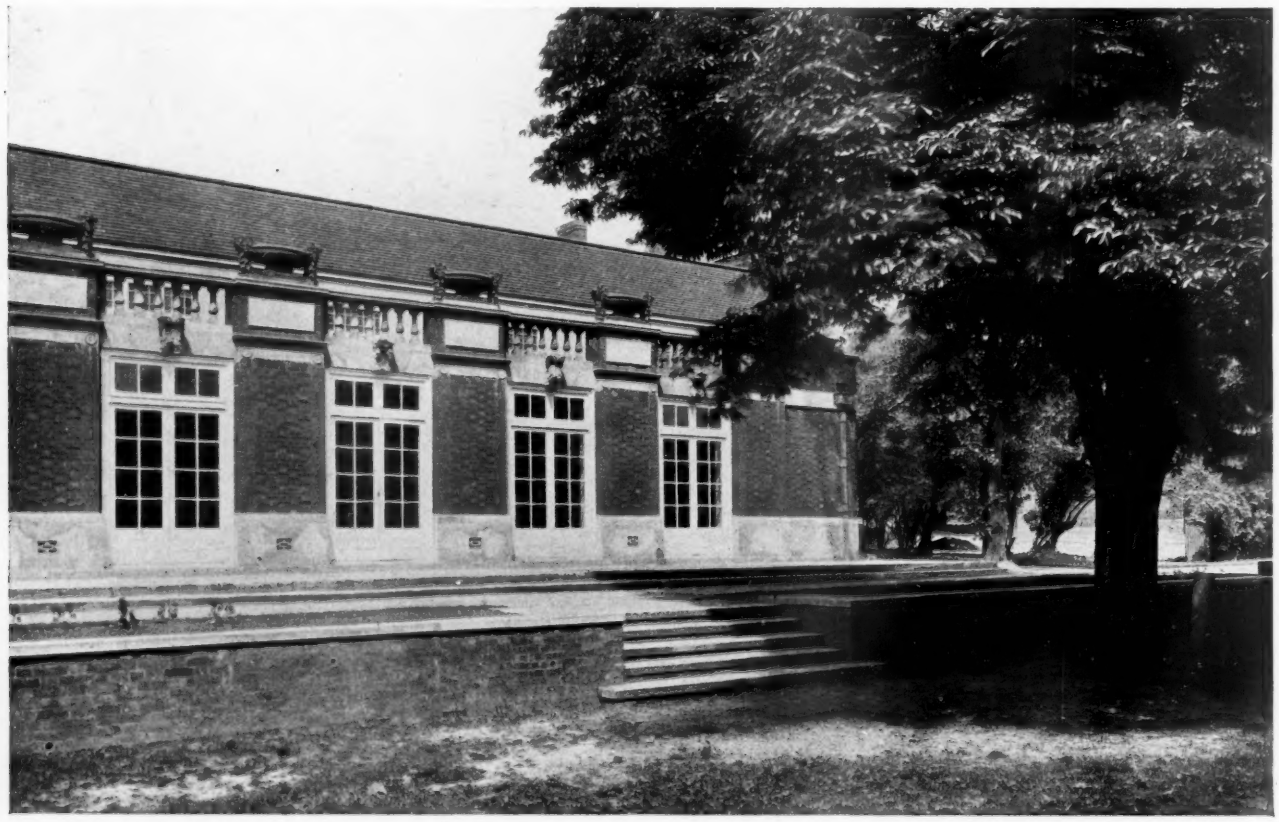
Valuable work has already been done in this direction by the opening of domestic training schools and polytechnics throughout the country, and the introduction of a domestic science course into a University is, as it were, the crowning of the edifice which is being built up. It will ensure these subjects taking their proper place in public estimation, and will, it is hoped, lead to the elucidation of many of the complex problems continually confronting the household managers of to-day.

The gracious interest which Her Majesty the Queen has taken throughout in the development of this movement has been a great encouragement to its promoters, and furnishes yet another proof of Her Majesty's unfailing sympathy in all that makes for the betterment of the home life of her people.

Those entering upon the work can take up either the one year's post-graduate course, or the three years' course intended for those who have passed matriculation, or who can otherwise satisfy the college that they are fitted by their general education to profit by the lectures. Single courses may also be taken by permission of the Warden. There appears to be a large and widening field of employment for women trained on these lines.

From the foregoing it will be realised that the scheme of this new college is of great interest from an educational point of view, and no less interesting is the architectural treatment of the buildings. These ultimately will form a complete quadrangle, but, as will be seen from the plan on the preceding page, the front block, comprising the administration offices, the college library, and various classrooms, has not yet been erected.

The college is entered from Campden Hill Road, where are two finely wrought gates in iron, flanked by brick piers, those of the main entrance gate being crowned by carved stone urns. Entering by the lower gate, we pass along a carriage-way to the entrance to the hostel. This block, like the rest of the college, is a straightforward piece of brickwork, carried out in bricks of excellent texture and colour, with just enough stone dressings and carved enrichments to enliven the whole and avoid all appearance of barrenness. The main entrance leads into a hall lined with Hopton Wood stone. To the right is the refectory, where the architects have had their chief opportunity for interior design, and have achieved an extremely pleasant result. The refectory is a room measuring about 75 ft. by 35 ft., covered by a barrel ceiling (in reinforced concrete) and lighted by French windows and by clearstorey windows. A range of columns extends down each side, and at one end is a slightly raised platform for the high table. The architectural treatment of this interior displays a marked sense of refinement. The plasterwork on the ceiling, for example, is in just sufficiently high relief to emphasise the lines of the construction, while not being too insistent and heavy, as much decorative plasterwork unfortunately is; the mouldings are correspondingly delicate,



SOUTH SIDE OF REFECTORY.

Laboratory Building, looking North-East.

Hostel Building, looking South-West.

Plate VI. July 1916.

KING'S COLLEGE FOR WOMEN, CAMPDEN HILL, KENSINGTON, LONDON, W.: VIEWS IN QUADRANGLE.

H. Percy Adams and Charles Holden, Architects.

Refectory.

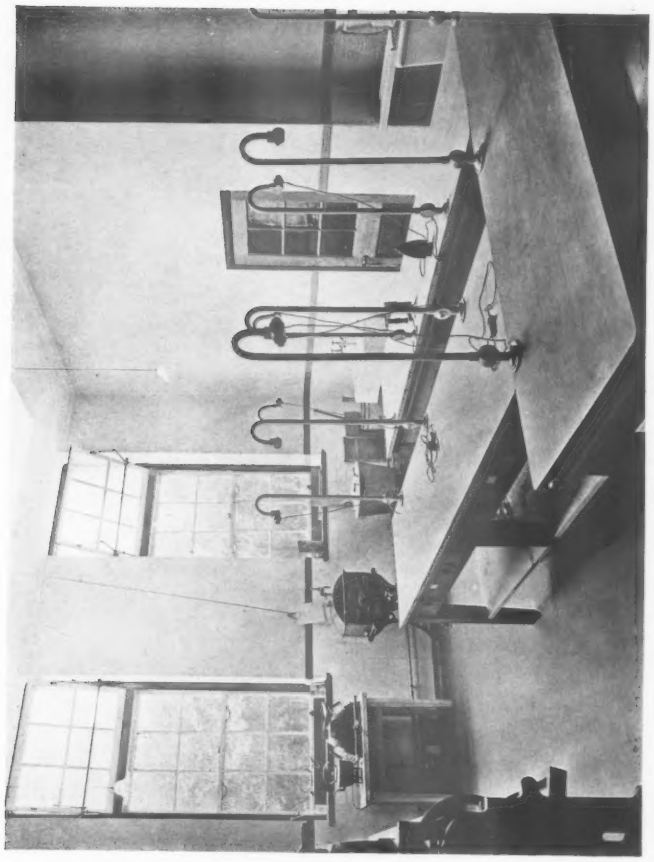
Common Room

Plate VII

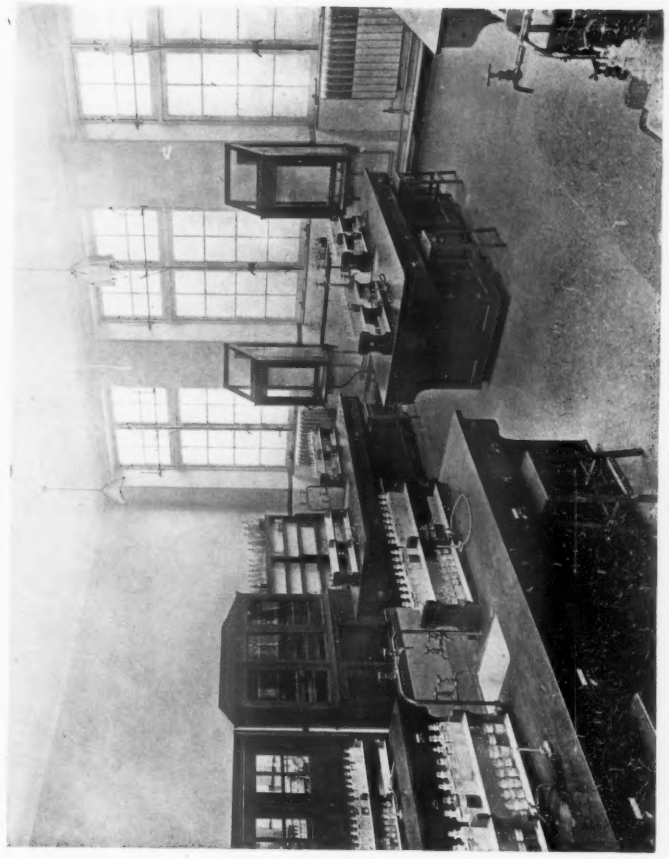
July 1916.

KING'S COLLEGE FOR WOMEN, CAMPDEN HILL, KENSINGTON, LONDON, W.

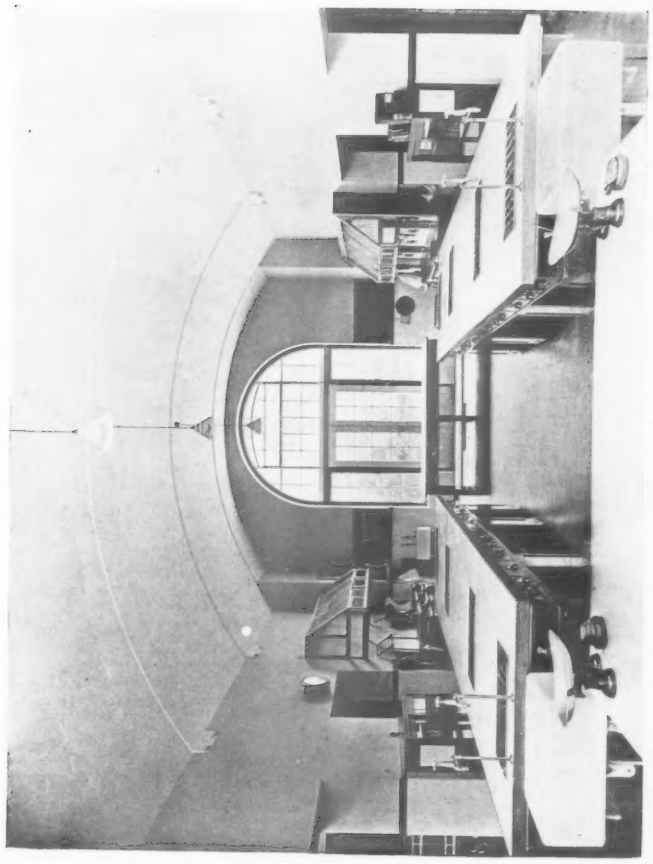
H. Percy Adams and Charles Holden, Architects.



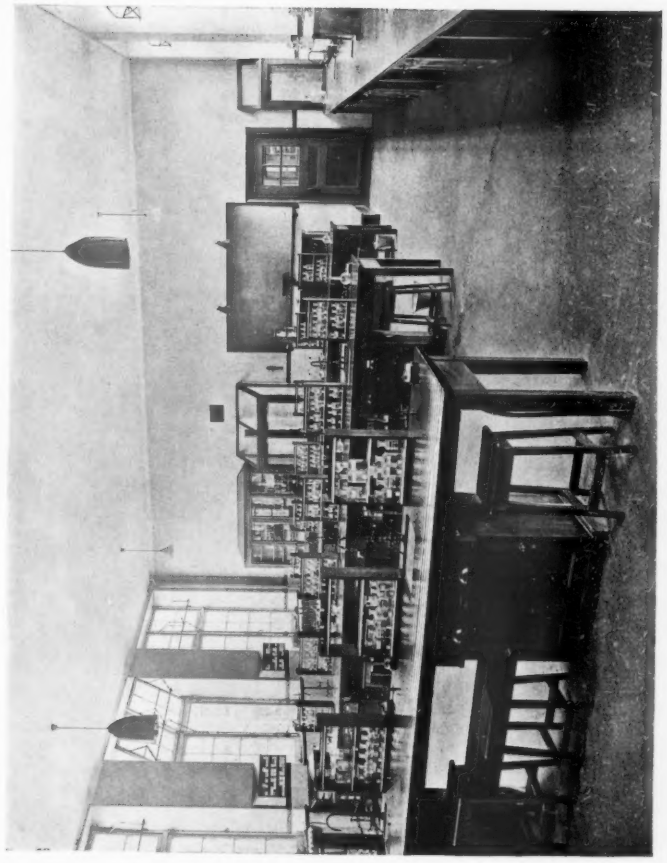
Teaching Laundry.



Chemistry Laboratory.



Teaching Kitchen.



Physiology Laboratory.

KING'S COLLEGE FOR WOMEN, CAMPDEN HILL, KENSINGTON, LONDON, W.

and the electroliers graceful in character. The refectory is finished entirely in white, and when its furniture is in place will be an exemplar of its kind.

With regard to the furnishing of the building generally, it may here be noted that the aim has been to combine sound construction with elegance of form, and the result is wholly satisfactory. There are tables and chairs, like those shown on the opposite page, which are able to stand any amount of handling, yet are not at all cumbersome. They follow on the sound English tradition of the eighteenth century, and as examples of modern furniture-making are a credit to those who were responsible for their production.

To the left of the entrance hall are the kitchen offices, and beyond these, on the west side of the quadrangle, are a series of rooms which are quite unique. They comprise a large teaching kitchen in the centre, with a teaching pantry, a teaching scullery, a teaching larder, and a teaching laundry in conjunction. These rooms are equipped with every kind of apparatus and fitting for cooking and other domestic work, and practical instruction and demonstration is given in them. The kitchen, for instance, has different types of stoves for cooking by gas, coal, and electricity; there are meters with glass fronts through which the working of the apparatus may be studied; there are two long benches with tiled tops and with sheet-iron recesses covered by grids in which gas burners are fitted; and other apparatus appurtenant to modern methods of cooking. In the teaching scullery one finds a similar complete equipment, while in the teaching laundry are appliances for ironing by gas and electricity, washing machines, mangles, etc. The floors of all these rooms, like the working kitchen offices themselves, are laid with red quarries, the walls having a dado of white tiles, finished above with white distemper. Everything is of excellent quality and finish; in fact, we have never seen a building of this kind which is finished better. The rooms, moreover, are very spacious and well lighted.

The hostel proper is installed in the south and west blocks. There are fifty-seven bed-sitting-rooms, to each of which a dressing-room is attached, the remainder of the hostel being occupied by the common-rooms, isolation-rooms, and administration offices. The common-room on the first floor, shown on Plate VII, is an extremely comfortable apartment, furnished in good taste, and having a fine marble mantelpiece as a focus of interest; and in connection with it we may note an application of craftsmanship which is immediately pleasing—the cast-lead grilles covering the radiators, which are set in recesses. The radiator, essential though it be, is generally more or less of an excrescence in a domestic interior, but this device of a lead grille of Adam character covers all its faults, and adds a new feature to the decorative scheme.

The laboratories block is on the north side of the quadrangle. On the ground floor are four large laboratories for physics, physiology, bacteriology, and hygiene respectively, and in connection with them a lecture theatre, a research-room, preparation rooms, and lecturers' rooms; the first floor being mostly occupied by chemistry laboratories, with various rooms in connection with them. These laboratories, in their equipment and finish, show the same sound construction and careful attention to detail which is noticeable throughout the building. The fittings—benches, fume cupboards, etc.—are of oak, the bench tops being of teak, and the floors laid with wood blocks.

In general architectural character the exterior design of the college is an individual treatment of the Later Renaissance; the refectory, for example, and the main entrance to the hostel, recall Wren's work at Hampton Court; but the whole has been given the touch of a modern artist, and the buildings thereby gain the interest that attaches to all personal work. The

BAY OF HOSTEL BUILDING.

ANGLE OF LABORATORY BUILDING.

retention of some fine old trees, and the laying out of the quadrangle with grass lawns crossed by brick paths, serves to relieve the purely architectural effect, and when in course of years the buildings have become mellowed by exposure the quadrangle will present a very delightful appearance.

The general contractors for the college were Messrs. Wallis & Sons, of Maidstone, and they deserve special mention for the admirable manner in which they have carried out their work.

Mr. Broadbent executed the finely-carved stone urns which are a feature of the quadrangle, and was also reponsible for the rich keystones over the refectory windows and the rest of the stone carving, which displays a rare skill with the chisel. Mr. Eric Gill executed the carved lettering, which, like all Mr. Gill's lettering, is clear and elegant.

Facing bricks and roof tiles were supplied by Messrs. Collier, of Reading, and bricks for dressings by Messrs. Lawrence. Casements were supplied by Messrs. Henry Hope & Sons, Ltd. The art metalwork in iron and lead was executed by Messrs. Thos. Elsley, Ltd. The electric-light fittings are by Messrs. Faraday & Sons—from Mr. Holden's designs: the two large electroliers in the refectory are of real bronze, and support bowls of alabaster.

The cooking and laundry plant was supplied and fitted by Messrs. Fletcher, Russell & Co., Ltd., Messrs. James Slater & Co., and The Gas Light and Coke Co.; Messrs. Fletcher, Russell having installed in the kitchen their "Langham" range, an example of the latest type of gas-cooking apparatus.

The laboratory fittings were made by Messrs. Baird and Tatlock, and most of the rest of the furniture (including the refectory tables and chairs) by Messrs. Heal & Son.

Tiles were supplied by Messrs. Minton & Co.; sanitary fittings by Messrs. Doulton & Co.; patent glazing by The British Challenge Glazing Co.: grates by Messrs. Bratt, Colbran & Co.

ENTRANCE HALL TO HOSTEL.

REFECTORY FURNITURE.

The Gas Light and Coke Co. were responsible for the gas-fitting; Messrs. Rashleigh, Phipps & Co. for the electric wiring; and Messrs. Berry & Sons for the heating apparatus. The decorative plasterwork was executed by the general contractors, Messrs. Wallis, from models prepared by Mr. G. P. Bankart (of Messrs. George Jackson & Sons, Ltd.) and Mr. Palliser.

BAD BUILDING IN THE "GOOD OLD TIMES."

In a paper read before the Concrete Institute, Mr. W. G. Perkins observes that the popular idea that buildings in the "good old times" were solidly constructed is erroneous. The majority of the buildings erected in London 100 to 200 years ago were, he states, constructed in the most inferior way. The mortar appears to have been compounded with a fat lime, dry slaked, mixed with the "top spit" of the field. Naturally it has had no binding properties, and is now just so much dusty rubbish. The bricks, moreover, were badly shaped, and they were easily broken, so that in taking down old walls course after course of what appear to be headers are found to be merely "bats." The wall thus consists of a number of $4\frac{1}{2}$-in. layers with no efficient inter-connection. These have separated and bulged, this condition being the state of many dangerous structures to-day. This bulging is, Mr. Perkins states, generally found in the basement storey, where the thickness of the wall is suddenly diminished by a set-off from, say, 1 ft. $10\frac{1}{2}$ in. to 1 ft. 8 in. In other cases a triangular patch of brickwork bursts from the walls. He has, moreover, observed a number of cases in which party walls 50 ft. high and perhaps 200 years old have failed by crushing, though subject to little more than their own weight, the stress being certainly under 3 tons per square foot. Brickwork of this inferior quality is, Mr. Perkins states, always stronger when exposed to damp, as the moisture enables the mortar to set to some extent. In other cases old walls have been found to consist of two skins of brickwork $4\frac{1}{2}$ in. thick, tied together by wooden laths at 18-in. intervals, the space between being filled in with small pieces of brick and stone. Many variants of this procedure were frequent, it appears, in the building practice of our ancestors.

NIEUPORT AND THE DRAMA OF FLANDERS.

IN the days when that country had tourists and bathers, the *tortillard* which served Belgium's coast from La Panne to Ostend, midway in its journey crossed the bank of a wide channel bordered with tall, slim, wind-twisted trees, and dived into the crooked street of a town having neat low houses, halting a moment on the quay of a little port where, mirrored in the colourless water, two or three great boats drowsed, their sails spread in the sun. Then the tramway, following its route, crossed, by means of stout locks, five canals which seemed to recede across the green plain till lost to sight.

It was a rare thing for a stranger to alight at that station; its name was obscure, and the names of the river which formed the port and of the canals which met in it were equally so. The guide-books scarcely mentioned them, much less solicited the traveller's attention on their behalf. The town was called Nieuport; the river was called the Yser, and that signified nothing to anyone. What should tourists be doing there? The little glimpse of river and town to be had through the carriage door sufficed for the most conscientious of them.

Strange to say, the dwellers in this little village, so disdained, showed a singular pride in it and attachment for it. It has often been remarked that the regions toward which Nature has not been generous, and which owe their prosperity to the slow and patient toil of man, have a stronger hold on the hearts of their inhabitants than countries have which are famed for the beauty of their site and the splendour of their climate; where, nevertheless, it seems that life should be so easy and so sweet. The people of Nieuport loved their flat humid country, the low-hanging mist of their meadows, the dull waters of their humble stream whose source was in France, and where lazy barges glided, level with the grass. Their town, with its sunken houses which could not be entered without bending the head, its white lanes, its over-wide squares, the fishy odours rising from the harbour and blended with the insistent fragrance of tar and wood from Norway, seemed to them a more enchanting spot than any other in the world. They lived in comfort there, and a citizen who had two thousand francs of revenue could never succeed in spending his income. A volume recently published, "The Drama of Flanders," explains and reveals the profound penetrating charm of these secluded lives; it is by M. Henri Malo, whose earlier studies of the corsairs of Dunkirk called him to this region of the Moëres and held him there. To this circumstance we owe the fine work which recounts his pilgrimages to the tragic cities of that land where he finally established himself, through love of quiet and desire for retreat.

The people of Nieuport, then, cherished their city for its present obscurity—also for its glorious past, of which they were proud, and a reverence for which was fostered in them by one of their fellow citizens, M. Dobbelaer.

M. Dobbelaer, town clerk, guided, sustained, and encouraged by his old burgomaster, M. Roo, had for many years piously inventoried all relics connected with the city's history, had removed the stains of centuries from the inscriptions on old dwellings and the iron numbers indicating their venerable age, had identified the great tombstones whereon might be read the sonorous names of Spanish officers whose bones kept company, beneath the church pavement, with those of Flemish burghers of heroic times. Through his researches he had formed, at the Hôtel de Ville, a museum of local relics, where were shown the series of communal seals dating from the twelfth century, a fishing ordinance issued by the Admiral Maximilian of Burgundy and painted on a panel of wood, rare engravings, cut stone from vanished monuments, coins found in the earth, among them some admirable gold pieces of the time of Charles V. The jewel of this museum was a triptych excellently painted by a Flemish "primitive," showing with exactness the city harbour in the fifteenth century. M. Dobbelaer had classified, filed, catalogued the archives of the community, seven hundred years old, with such method and such ardour that no other similar collection in the world, even the most celebrated and the best endowed, could rival his in excellence and clearness of arrangement.

The town clerk had accomplished these things without resources, without outside help, simply by the miracle of his devotion to the past. He had done better still—he had communicated his archæological fervour to all his fellow citizens. He set himself developing in the school-children a taste for the decorative arts as well as a respect for the ancient stones which have seen history. He took them on expeditions to the ruins of old ramparts buried in sand and vines, explained to them the antique collegiate church with its squat bell-tower, made then admire the heavy and dismal donjon of the archdukes, the old pointed lighthouse of whitish brick, where the Spaniards formerly built fires of straw; he associated them with his discoveries, one of which overwhelmed his ardent heart as with the joys of paradise—a magnificent old pavement of polished tile under a pure Gothic vault! This good and learned man had thus aroused in the souls of the Nieuport people such an intelligent affection for their noble and yet humble city that they looked upon it with a feeling not less than that of the Ypres burghers, so justly proud of their famous Drapers' Hall, or even that of *ces messieurs* of Furnes for their celebrated square with its fantastic gables and open-work spires. The whole city bore marks of an educated taste which sustained the traditions of centuries of beautiful architecture, and nothing further was done there without consulting M. Dobbelaer; no house might be rebuilt but after plans drawn according to engravings of "the period," executed in relief, and submitted to the municipality. He himself took care that in restoring edifices there were employed only ancient bricks, not moulded in the manner of to-day, but cut as of old, after the processes and with the tools of former times.

He experienced in the spring of 1914 great pleasure in the visit of a stranger travelling as an artist through the country, a gay youth who drew and photographed skilfully, following a singular calling—"architect of steeples." Because of this, he climbed all those in the region, at Dixmude, at Ypres, at Furnes, at Nieuport. People amiably furnished him with useful information for his researches, and were delighted to drain beer-glasses with him. At the beginning of summer the "architect of steeples" disappeared.

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Some days later the fearful hurricane breaks upon Belgium; a sheet of fire, a hail of steel; the cities crumble; Louvain is in flames, then Dinant, Aerschot, Termonde, Namur. They who fly before the invaders report terrible things; beautiful *hôtels de ville* with their lacework spires are swept away by shell-fire; churches, sculptured like reliquaries, are showered with oil and destroyed. Heavy heels crush on the pavements the remains of marvellous stained-glass windows; the Uhlans boil their soup over fires fed with early records and illuminated manuscripts; the divine tower of Malines serves as a target for heavy artillery! And suddenly a cry of horror arises,

a lamentable cry: "The *Halles* of Ypres are on fire!" From the summits of Nieuport's towers can be seen, blazing like torches, all those beautiful belfries that once threw upon the pearly sky their lofty and delicate silhouettes, rising like slim poplars of stone against the horizon. Can one imagine the misery of the poor archæologist at the approach of this infernal invasion? His city, his dear city restored through his impassioned care, the work of his whole life, his only thought, his beloved, exposed without possible defence to the rage of these brutes! Picture the despair of "Cousin Pons" at the approaching roar of a cyclone shaking the old house where for many years he has garnered the frail relics of the Art of the Past. What can be done, what miracle implored, to stay the scourge?

We shall know, some day, if it was not through M. Dobbelaer, through the documents so patiently deciphered and arranged by him, that Father Kogge, the keeper of Nieuport locks, found the century-old and forgotten sluice-gate whose opening allowed the sea to invade the Flanders plain. A desperate but sure recourse—rather the mud than the enemy! And the plain became mud, then a lake, then a sea; the water rose, hurrying, without pause, submerging pell-mell the batteries, trenches, blockhouses, stores of grain, prosperous villages, cultivated fields. All disappeared: the region of the Moëres was destroyed, yet saved. Nieuport, on the contrary, was lost; for the baffled enemy avenged their repulse upon the city, after the fashion in which they had avenged former ones upon Arras and upon Reims.

From afar, without risk, without glory, as without profit, they directed against her the storm of their incendiary missiles. From the high dunes, one night, could be seen above the deserted town a red light growing and overspreading the sky. The furious sea-wind spread the flames; here and there, over the countryside, other fires were kindled—they were the burning farms, the great rich farms of the fertile Flemish land. And in the central furnace sank away one after another the Spaniards' lighthouse, the squat belltower, the Hôtel de Ville with its museum, its neat cabinets, its "pieces" so fondly arranged and labelled; the ancestral dwellings restored with such fidelity, the Halles and their campanile—all, all, all! . . .

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To-day, Nieuport-the-Noble is a heap of calcined stones, a mass of wreckage where may be found scarce a trace of streets, squares, or buildings. And in the approaching hour of reckoning, in the fateful account, it will be found that almost equal with the cries of mothers, wives, and orphans are counted the sobs of the gentle archæologist, his heart wrung and bleeding with the cruel memory of all those poor treasures which he had saved from the pitiless pursuit of the ages, but could not protect from the Huns—*Translated from the French of G. Lenotre in the Paris "Temps."*

THE DESTRUCTION OF CHURCHES IN FRANCE.

As an addendum to the foregoing account of the havoc wrought by the Germans in Flanders, we may give the following excerpt from an article by Mr. Whitney Warren, just published in our contemporary *The Architectural Review* of Boston, Mass. Mr. Warren is a well-known American architect who has made an intimate study of the destruction in France. He says:—

"If the war in Europe has accomplished nothing else, it will have performed an important service in correcting previous existing misconceptions as to the national characteristics of Continental peoples. The homely solid German has proved to be the degenerate of Europe—as moral degeneracy alone explains the disregard of national and individual ideals of honour, the sordid grimness of acts of pillage, rapine, and destruction to which the countries over which they have passed have been subjected. From a nation of scientists striving to better civilization, they appear to have perverted all their knowledge and information to its ruthless and utter destruction. . . .

"It was perhaps to be expected from Germany, a country whose sense of taste or art appreciation has remained so crude, so elementary, and so inexpert; where strength has been developed at the expense of delicacy, and the vulgar appeals of the baroque and rococo preferred to the subtler refinements of classical art. From a nation so stunted in full development such a martyrdom of mutilated cities, a decapitation of cathedrals, and assassination of architecture should perhaps have come as no surprise.

"All that could be seen or confirmed along the front seemed to prove the Germans possessed of an unhealthy desire for destruction. Reims, Arras, Ypres, Soissons, and many another as yet uncatalogued town—and innumerable villages—have been victims of these profanations, most of which have not the excuse of any possible military necessity. . . . A certain amount of this destruction is, of course, unescapable; and it has, in times past, even been a recognized custom of war to follow this necessary destruction by further acts of spoliation of products of art and beauty from a conquered or semi-conquered people. Hardly ever before, however, in the history of our world, even in remote and so-called barbaric times, has there been so much evidence of a wild and savage spirit of destruction, comparable only to the 'Berserk' rage, as has animated the German armies in their desecration of portions of France and Belgium. . . .

"So far as this destruction applies to Reims, for instance, the facts are known. Reims was well behind the French armies at the time it was most bombarded, just as it is still well back of the line of combat during these recent weeks that its bombardment has been resumed! Arras is an even better—and far less well-known—instance of this same senseless destruction of the architectural monuments of France. . . . But other instances of mere useless insensate destruction are far more numerous than these. At Vassincourt but one house is left standing in all the village. The church remains, but in a maimed and desecrated condition—a typical instance of senseless German destructiveness. At Heilz-le-Maurupt a lovely and beautiful old Romanesque church has been criminally assaulted, sacked, and uselessly wrecked, along with the house of the village curé, with no cause or excuse whatever; while but 25 houses remain standing from a former peaceful community of 150 homes! In the Department of the Meuse, at Laimont, of 168 houses 76 have been burned and 92 damaged; and at Sommeilles 119 destroyed of the original 125.

"The worst crimes committed by the Germans against the helpless stones themselves should be permitted to remain as imperishable monuments to coming generations of their nation's essential barbarism. For this reason the Cathedral at Reims, or any other monuments of the past against which they have vented their rage and impotency, should not be restored. Allow the wounds to heal, if you will; repair them enough to protect from future ravages of time and weather—but make no attempt to restore them to their original beauty."

STURGIS AND FROTHINGHAM'S HISTORY OF ARCHITECTURE.

FERGUSSON and Gwilt in England; Viollet-le-Duc and Choisy in France; Geymüller in Germany—these are the outstanding names of the historians of architecture, but they have had their day. There was room for a new history collating their works, supplementing their materials with the results of later investigation, revising their conclusions in the light of more mature knowledge, and more in accordance with modern views and with the more highly developed methods of criticism. Mr. Russell Sturgis made a very gallant attempt to supply this want, but he died while the second of the three volumes he had projected was still in the press. Whether his completion of the work would have entitled him to take rank among the few great historians of architecture must therefore remain undetermined; but we fear that his rather perfunctory performance in the two volumes he gave us dispelled any hope that the completed work would accord him an assured place in the hierarchy. Mr. Frothingham, in taking up the work, had a fairly free hand, for Mr. Sturgis had left no manuscript covering any part of it, nor any memoranda that could be used, and had not even outlined its plan. There is no reason to regret the fullness of his liberty; unless, indeed, it involved the obligation to write against time, which is improbable, seeing that the respective dates of the second volume and the third show an interval of five years, which seems an ample period of gestation. But, whether or not the author was pressed for time—and there is no internal evidence of undue haste—he probably felt the disadvantage of prescription as to time, space, and method. Working independently of these conditions, he would have been free to give us more of analytical criticism and less of condensed description.

It is fairly evident that a comprehensive history of architecture, if it is to be at all adequate, must be the work of several hands, each contributor knowing, architecturally, not all about everything, but "something of everything, and everything of something." Mr. Sturgis, having employed this system in his "Dictionary of Architecture," might have been expected to realise the insufficiency of a one-man history of architecture. It is simply impossible for one man, however scholarly and judicious, to be equally conversant with, and equally sympathetic towards, all the phases of the architecture of all ages. It would, we think, be easy to make out a good case for specialisation. There are many respectable precedents, such as the great Cambridge "History of English Literature," which is the work of many specialists. The principle is equally applicable to architectural history, in which period, style, phase, provenance, call for special study, and commonly receive it in the form of monographs, such as those associated with the names of Mr. Blomfield, Mr. Gotch, Professor Lethaby, Mr. Phené Spiers, and others who speak with authority and not as the scribes. Moreover, there has arisen within recent years a more philosophic method of criticism than that which gave satisfaction a decade ago; and the older exegesis is shallow and paltry in comparison with the deeper soundings (whether intellectual or emotional) of such luminous essayists as Mr. March Phillipps, Mr. Geoffrey Scott, and Mr. A. Trystan Edwards.

In the first volume of this history, Mr. Sturgis dealt with the architecture of antiquity, and in the second he treated of Romanesque and Oriental remains. Mr. Frothingham resumes the narrative with "Gothic in Europe," and into the concluding volume he compresses "Gothic in England, Renaissance, Modern Architecture." There is in this work an intolerable deal of Gothic to a ha'p'orth of Modern; whereas it would have been much less surprising if the practical-minded Americans had reversed these proportions, magnifying the living interests and minimising those that, if not dead, are mainly archæological.

Sturgis and Frothingham's "History of Architecture" is nevertheless a valuable and beautiful possession, comprising, as it does, many hundreds of illustrations of the world's monumental buildings, and a running commentary on them that is critical and scholarly, "safe" and commonplace. Of minor but yet considerable importance is the fact that it is eminently readable, Mr. Frothingham being happily endowed with an easy and agreeable style, which, however, he disdains to put to the base uses to which a mere "populariser" would be tempted by fluency. Mr. Frothingham never forgets that he is writing mainly for architects; yet this is a history which the most ignorant layman as well as the best-informed architect can read with pleasure and profit, and consult with confidence.

"*A History of Architecture.*" [*Volumes I and II, by Russell Sturgis, A.M., Ph.D.*] *Volumes III and IV, by A. L. Frothingham, late Professor of Archæology and the History of Art, Princeton University. Volume III—Gothic in Italy, France, and Northern Europe. Volume IV—Gothic in Great Britain, Renaissance, Modern Architecture. Garden City, New York: Doubleday, Page, and Company. London: B. T. Batsford, Ltd., 94 High Holborn. Price 25s. net each volume.*

A GIFT OF ENGLISH FURNITURE.

MR. FRANK GREEN, of Treasurer's House, York, has recently presented to the Victoria and Albert Museum a number of important pieces of English furniture, together with several other objects of considerable artistic interest. The furniture belongs for the most part to the period of the later Stuarts and William and Mary, and includes several types hitherto unrepresented in the museum collections. Among them may be specially noted a pair of walnut chairs of about 1700, covered with embroidery in silk and wool, representing vases of tulips, carnations, and other flowers, and two stools similarly covered, also a single chair covered in finer embroidery with floral designs. Another chair, with a tall back carved in openwork and a seat covered with embroidery, belonging to the period of William and Mary, is illustrated in Macquoid's "History of English Furniture." Several interesting tables are included in the gift. Of these the earliest may be attributed to the later years of the seventeenth century. It has legs carved in open spirals, and a top decorated in marquetry, and fitted with a panel enclosing a backgammon board. This table also is illustrated in Macquoid's "History." Another table of about the same period as the above is of gilt wood with gilt *gesso* top finely ornamented in French style, such as characterises the period of Louis XIV. A third specimen, a side table of gilt wood, in the style of William Kent, is a typical example of the massive furniture which adorned the great houses of England during the reign of George II. These pieces are exhibited in Rooms 55 and 56 of the Woodwork Galleries. It is well known that the Victoria and Albert Museum urgently needs good specimens of English furniture, and Mr. Frank Green's generous gift is the more welcome at this moment when public funds are not available for making purchases. Moreover, pieces like these, which belong to the best period of English craftsmanship, are year by year becoming rarer, and more difficult to obtain.

NOTES OF THE MONTH.

The A.A. War Service Bureau.

The following report upon the work of the Architectural Association War Service Bureau is reproduced from the May issue of the *A.A. Journal*:—With the advent of the Military Service Bills and the consequent general changes in the recruiting arrangements for the army, it is perhaps opportune to make a general report upon the work of the A.A. War Service Bureau. The Bureau was started a few days after the commencement of war, largely on the initiative of Mr. Alan Potter, who undertook the secretaryship. The object of forming the Bureau was to help men in the architectural and allied professions and trades, by obtaining for them information as to the corps which were recruiting in which their special knowledge would be of value. At the beginning of the War most people were in complete ignorance of military matters, and had little knowledge of the various branches of the army and their work, and the Bureau made it its business to be a centre from which information and assistance could be obtained by anyone wishing to enlist. To further its usefulness, the Bureau got into touch with various units and recruiting offices, and made arrangements whereby parties of men sent by the Association were kept together after enlistment. This arrangement was valuable in encouraging professional men to enlist in the early days of the War. Without exception the commanding officers welcomed the type of men which the Bureau was able to send, and did everything possible to facilitate matters. The Royal Engineers has been a favourite branch amongst would-be recruits, and many hundreds of men have been drafted into its various branches, such as signalling, fortress, field companies, etc. The Bureau has been able to obtain commissions in this and other branches of the service for a considerable number of men. The various sanitary companies have received a very large number of recruits through the Bureau, and in these professional training has been of the greatest value. Special efforts were made to obtain recruits for the "Artists' Rifles," with considerable success, and openings have been found in all the following units for recruits: Royal Engineers (Regulars); 1st and 2nd London Div. Engineers (T.); 1st and 2nd London Sanitary Companies; "Artists' Rifles" (O.T.C.); "Artists' Rifles" (Engineer Section); Inns of Court O.T.C.; London Rifle Brigade; Royal Naval Air Service; Royal Naval Division (Engineering Units); Army Pay Corps; Army Ordnance Corps; 8th London (Howitzer) Brigade, Royal Field Artillery; Royal Field Artillery; Royal Garrison Artillery; Army Service Corps, Mechanical Transport; Army Service Corps, Horse Transport; London Scottish; Hon. Artillery Company; Westminster Dragoons; Queen Victoria's Rifles; Public Schools Batt., Royal Fusiliers; 2nd South Midland Brigade Field Ambulance (Res.) (T.F.); Civil Service Rifles; King's Royal Rifles; 25th (Cyclist Batt.) London Regt.; Royal Flying Corps; and various other infantry regiments. It is estimated that at least 2,000 applications to the Bureau have received attention, and although it is difficult to say definitely that all of these men have acted on the advice of the Bureau, from records kept it is known that the vast majority of them have joined the branches to which they were recommended. Amongst the members of the building trades a very large number of recruits have been drawn, one company of 300 being raised within a few days for the special engineering work in the Naval Division. It was found, on questioning applicants, that in many cases they possessed qualifications which fitted them for branches of the service of whose existence they were not aware, and, apart from the fact that these men were sent to vacancies where their services were of special value, the men themselves received the advantage of higher pay on account of their skilled training. The Bureau has had to deal with intermittent rushes of recruits, but there has always been a steady stream until recently, when the new military arrangements altered matters very considerably. Apart from the actual enlistment of recruits, much work has been done in attending to private matters, such as the obtaining of correct separation allowances, and many other details which it is unnecessary to enumerate; but in one case at least the arrangement for the removal and warehousing of a recruit's furniture was undertaken. The A.A. Active Service Committee was an outcome of the Bureau, but everyone is fully cognisant of the excellent work which is being undertaken by that Committee under the chairmanship of Mrs. Webb, and this will no doubt be fully dealt with in a report at a later date. As a result of efforts in another direction, the A.A. Red Cross Detachment (43rd London) has been called into existence, and is now, and has been for some time, undertaking most useful work; but, again with this branch, its work must be recorded at a later date in a separate report. Every credit should be given to Mr. Potter for the valuable work he did in carrying on the Bureau up till April of last year, when he joined the R.N.A.S., and to Mr. F. R. Yerbury, who then filled his place. It was due to their initiative that the Bureau came into existence, and to them must the credit be accorded for the important place which the Bureau has taken in the Association's work since the War began. To Mr. G. O. Scorer also thanks are due for the assistance which he gave for many weeks in connection with the work, and the help given by Mr. Alexander, of the A.A. office staff, deserves every praise.

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The Standard Cottage.

Professor Adshead is among those who recognise the merits of standardising the cottage. Though the teachings of the Ruskin and Morris schools, which stand for the consecration of the individual, are utterly opposed to any system of standardisation, Professor Adshead contends, in the *Town Planning Review*, that the standard cottage is an integral part of a highly-organised social system, and that without it we cannot have that which lies at the very root of national efficiency, organisation, and economy—"and if the War has proved anything, it has proved that national efficiency in the future will depend almost entirely upon good organisation. Organisation is the keynote of the success not only of the modern nation but also of the modern community. Organisation demands the marshalling of individuals having similar interests, and, within limits, there should follow uniformity in the appearance of their homes. But just as organisation which is carried so far as to entirely eliminate the individual, and where the individual becomes nothing more than a cog in a wheel, will merely produce mechanical progression, so the standardisation of the cottage, unless limited to community interests, and unless so unrestricted as to allow of the expression of the individual within these limitations, will produce nothing but a dull depression, and a monotony that will most assuredly suffocate the soul. And therefore it would seem that in the towns and villages of the future where cottages will be standardised, they should be placed on their sites as component parts of a composition, and should be furnished, curtained, and gardened without any sort of outside interference, and in accordance with the tenant's personal whim, for it is here that he will be afforded that opportunity of converting his standard cottage into a veritable home . . . Thus we shall get not a village where each dwelling expresses the foibles of its tenant, or what in practice usually happens, the expression of these as understood by an architect, but instead a thoughtfully composed collection of groups of similar units, each of which contributes to the making of a composite design, and each of which bears

the impress of being part of a carefully-considered scheme . . . In approving the design and construction of standard cottages it must not be assumed that in the future the individually designed cottage will be a feature of the past. A first place must always be allowed for the specially designed cottage. But there will be a further type, a type specially designed, but made up of standard details and constructed out of standard materials. A cottage is not a sardine tin, which in process of manufacture hardly comes in touch with the human hand; it is a thing which, however often repeated, will always receive during erection some leisurely consideration, and stray thoughts will pass through the mind of the workman as to the advantages of additions, omissions, or revisions. And thus, though we may reasonably expect to see erected a certain number of exactly similar standard cottages, we may expect also to see far more made up of standard details, but each having a variation in plan and general outline . . ."

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The Frieze on the Parthenon.

Writing as to the proper title of the frieze around the Parthenon, "Ubique," in the *Architects' and Builders' Journal*, says: "We know that frieze well; fragments of it we can see at the British Museum (or, to be correct, we *could* see them before the Government became miserably economical in closing the museums, while at the same time paying pensions of £5,000 a year to retired Lord Chancellors); and every architectural history-book shows us the crowded procession of frisky little Greek horses. Decimus Burton put the frieze around his Athenæum Club, and Barry made use of it next door in the Reform, and in a score of other places we can see it—most recently of all in the new Empire Theatre at Cardiff. But are we to call it the Parthenon frieze or the Panathenaic frieze?—that is the point. . . . I think it must be admitted that we can use either expression, though perhaps it is more correct to describe the frieze as the Panathenaic frieze, with accents on the 'ath' and the 'na.' Every year the Athenians formed in procession for the festival of the Panathenæa, and once in every five years they had an especially elaborate celebration, extending over several days and including contests in athletics, music, and rhapsody; the successful competitors in the athletic contests being awarded amphoræ which were embellished with the figure of Athena and were filled with olive oil from the sacred trees (how strange a contrast with our own times; imagine the winner of the 200 yards handicap at Stamford Bridge being presented with a decorated jar of oil, instead of what he expects to receive—a set of fish knives and forks or a very solid black marble clock in the Bexhill-Classic Style!). The procession wound its way joyously up to the Acropolis, a richly-embroidered peplos for the tutelary goddess being borne on high between two poles like a glorious banner, and when this robe had been placed on Athena's figure, and the religious ceremonies had been gone through, the festival was consummated. Phidias's frieze, carved sublimely in marble, has familiarised us with this Grecian rite, and we know it as the Parthenon frieze; but, as I have said, we should be more correct in referring to it as the Panathenaic frieze."

NOTES OF THE MONTH.

New Fellows of the Institute.

The following new Fellows of the Royal Institute of British Architects were elected last month:—G. R. Farrow, C. E. Varndell, E. Cratney, G H. Lovegrove, B. A. Poulter, James Thomson.

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The Term "Jerry-Builder."

The origin of the term "jerry-builder" is thus explained by Mr. Willoughby Maycock in *Notes and Queries*:—"In the early part of the nineteenth century the firm of Jerry Brothers, builders and contractors, carried on business in Liverpool, and earned an unpleasant notoriety by putting up rapidly built, showy, but ill-constructed houses, so that their name eventually became general for such builders and their work, first in Liverpool, and afterwards through the whole of this country."

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A Remedy for Damp Walls.

A very damp wall in the mayor's house at Winchester gave considerable trouble to the Corporation. Many remedies were tried, with unsatisfactory results. Ultimately the chief sanitary inspector suggested a Pudloed cement rendering, and by this means a permanently dry wall has been obtained.

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French Honour for a British Architect.

Major H. Phillips Fletcher, F.R.I.B.A., F.S.E. (partner in the firm of Banister Fletcher and Sons), of the Middlesex Hussars, has returned to England on being seconded to the Royal Flying Corps. The major had been attached to the French Navy as commandant of the British Military Observers, who were flying with French pilots in the East. He was awarded the Croix de Guerre in August last for reconnaissances under fire for the first time, and before leaving the French squadron received it again on two further occasions, once more for work with the Navy and once with the French Army. This entitles him to wear palm leaves and two stars on the riband of the order. He is the only British officer thus decorated.

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London in 1975.

Lecturing at the London Society, Mr. Arthur Crow urged the necessity of a development plan for London in which provision should be made for main arterial roads. Unless a proper scheme was adopted London would, in its growth, be strangled. "Assuming," said Mr. Crow, "the population of London to have increased to twenty millions in the year 1975—about two generations hence—the extent of land required in order to ensure the healthy housing of the people would be 1,040 square miles, allowing thirty persons to the acre over the whole area, including open spaces, streets, manufactories, and all non-residential areas, or from forty to sixty persons to the acre in the housing and residential districts. An area of this extent would be contained within a circle having a radius of eighteen miles."

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Forthcoming Arts and Crafts Exhibition.

The forthcoming exhibition of the Arts and Crafts Exhibition Society, to be held in the galleries of the Royal Academy in the autumn, will be open to all craftsmen, whether members of the Society or not, and works will be received and exhibited under conditions similar to those of the summer exhibitions at the Royal Academy. The address of the secretary, Professor E. S. Prior, A.R.A., is 1 Hare Court, Temple, E.C.