

THE ARCHITECTURAL NEEDS OF SOUTH AFRICA.

The purpose of this paper is to plead for the revival in the laying out and designing of our cities and buildings of those principles of largeness of conception, restraint, and subordination of detail to a central idea which inspire what has sometimes been called "the grand manner" of architecture. My contention is that on these principles the great and permanent qualities of architecture in all ages have depended, and that the cause of the modern deterioration of our civic architecture is their abandonment during the Romantic and Gothic revivals of the last century.

To many of us, brought up on the teaching of Ruskin and his disciples, the "grand manner" may perhaps suggest the affectation and stiffness into which architectural style crystallized at the end of the eighteenth century: faults which to some extent may have justified the severity of its critics. But the abuse must not be confounded with the use, and there was no reason for such a revolutionary reaction as that which destroyed both good and bad in the old architectural régime. The Gothic revival was mainly a literary movement; and its prophets, not having devoted their lives—as all artists must—to the absorbing and inscrutable problems of the craft, were apt to ignore the deeper and more essential qualities of the art which they so freely criticised. Thus they taught us to believe that architecture consisted in the wealth and intricacy of picturesque detail. "Sketch, sketch, sketch!" was the motto given to students by Scott and Street, the great architects of the Gothic revival, and architects and the public forgot that the greater and eternal qualities of the art are scale, balance and symmetry, orderly arrangement, and a simplicity which subordinates details of design to a big conception and to the demands of surrounding nature. Ruskin, for instance, wrote a "Bible" of beautiful criticism, which was true as far

as it went, on the carvings and details of the Doges Palace at Venice. Yet he failed, as far as I know, to express an appreciation for the magic qualities of what is really the classical rather than the Gothic design of the building as a whole, which, more than its lovely detail, makes it one of the most impressive buildings in the world.

Thus, through the agency of such fascinating literary criticism as his, traditions and methods of thought essential to noble architecture, which were the growth of centuries and were once an essential part of every liberal education, have been lost, and can only be recovered with time and difficulty.

Of the ancient instances of the "grand manner" of building which follow it may be said that, being in most cases the work of despots, who built to display their own magnificence and power, they are false and dangerous examples for more civilized and democratic nations to follow. But the answer to this criticism is that the despot was right in recognizing that the beautification of his city was the best method of embodying, in a way that would appeal to his people and foreign visitors, the idea of civic and national dignity and power. Whether the motive was good or bad, the lesson is the same. It is for the people themselves who now hold the power to show their capacity to reject the bad and accept the good of older civilizations and build permanent and beautiful records of their faith in themselves and their nations. For on these records will the verdict of history be largely based.

In the absence of accurate knowledge of the plans of Assyrian cities I must first instance the Egyptians, who, in their glorified mud and cave architecture, appreciated to the full the value of the great principles of symmetry, length of vista, and monumental simplicity expressive of power. The approach to the temple of Karnac at Thebes was through an avenue of sphinxes and obelisks over a mile long. The temple itself consisted of six huge symmetrical colonaded courts with pylons or colossal gateways in the centres, arranged so that from the entrance pylon a vista of 1,150 feet through pylons, courts and gigantic columns led the eye to the central shrine. The architectural means employed were of the simplest—column, lintel, plain wall surface, and unbroken horizontal skyline—yet no one could have left the temple without carrying through life a deep impression of the immatable power of Egypt and her gods.

But Greece is the most interesting example to us, because either directly or through the Hellenistic cities of Asia Minor and Egypt, or through Rome, it is the source of all our arts. The Greeks at the height of their artistic development, in the time of Pericles, were not a peaceful or a united nation. Their cities, built on hills for protection, presented little scope for monumental or symmetrical planning. Yet they had a wonderful eye for impressive effect from a distance, especially from the sea. Athens, Agrigentum, Selinus, had groups or rows of temples ranged along the skylines of cliffs which overlooked the town, the harbour and the sea. The carefully studied scale of these temples was large enough to impress the beholder from a distance with the beauty and glory of the city. It is easy to imagine how the Greek sailor, "the merry Grecian coaster," returning from a long sea voyage must have venerated his home. The greatest skill was displayed at Athens, where a carefully studied balance, if not absolute symmetry, of effect was shown in the arrangement of the buildings on the Acropolis. A steep flight of steps up the cliff led to the great colonnade of the Propylæa. On one side of this stood the little Temple of Victory, and on the other a sculptured monument: these two balanced each other, standing out clear against the sky on spurs of the cliff. Above on the flat top of the rock were the Doric Parthenon and the Ionic Erechtheum, again balancing each other on either side, each being carefully placed so as to have the most imposing effect as seen, the Parthenon from the harbour and sea, and the Erechtheum from the city. In the centre stood the giant statue of Athens, patron goddess of the city.

The effect of the Parthenon, crowning the skyline of the Acropolis, the symbol of all the Greek held sacred, designed to be seen over the sea and the plains of Attica, is a supreme instance of the value of restraint and subordination to an idea in architecture. Volumes have been written about the geometrical and artistic subtleties of the lines and curves in the details of this building. Whether these subtleties were all deliberately and ingeniously invented, for artistic reasons, by the architects, or were the result of tradition, structural need, and ordinary commonsense (as in many cases I am heretical enough to believe), they should not affect in the least our reverence for the beauty of the temple itself. Its nobility, apart from the sculp-

ture, depends primarily on the simple row of seventeen similar lintel-spaced columns ranged along the top, and in scale with the steep cliff which formed the Acropolis.

The Sicilian town, Agrigentum, with its row of six temples on the skyline of a long "kopje" overlooking the sea, and the sea-girt and temple-crowned rock of Selinus, are other great examples of the imaginative faculty of the Greeks for the effective disposition of their public buildings. The same genius was shown at Halicarnassus in Asia Minor. Vitruvius, an authority on architecture who lived in the reign of the Emperor Augustus, writes of this town: "The site of the city is like a theatre in form. On the lowest part of the harbour is the Forum; on the curve higher up, about the middle, was a precinct in the centre of which was the Mausoleum, a work so marvellous that it was accounted one of the seven wonders of the world. In the centre of the highest part of the city was the Temple of Mars, with a colossal statue. At the right-hand point of the curve was the temple of Venus and Mercury and the fountain of Salmacia. On the left horn stood the Royal Palace, planned by Mausolus himself."

Mausolus died in 353 B.C., and he is credited with having designed his own monument. Halicarnassus is probably the first known example of a hill town based on a generally, if not rigidly symmetrical plan. It must have been possessed of extraordinary beauty, if we may judge from the above description and from the architectural and sculptural fragments of it, including statues of Mausolus and his wife, which are preserved in the British Museum.

But the city of Pergamos was laid out on a still more magnificent conception. It is too often supposed that Greek architecture ended at its period of highest perfection in the age of Pericles, and that there is a gulf between it and the Roman. It never, it is true, reached puer or greater heights; but in width of range and skill in planning it had noteworthy developments under the rich dynasties which partitioned the Empire of Alexander. Roman architecture owed more to Pergamos and Alexandria than even to Athens itself: to its disadvantages, perhaps, as far as the purity of its art was concerned.

Pergamos, on the coast of Asia Minor, was founded by the Attalid Kings, whose dynasty lasted from B.C. 170 to B.C. 135, when their dominions were peacefully absorbed by Rome.

The following description of it is condensed from the lectures delivered at the Royal Academy by Mr. Reginald Blomfield, A.R.A., and published under the title of "The Mistress Art." This is one of the most useful books on architecture that has been written for many years.

Pergamos was built on a lofty and isolated hill, running from north to south and curving round a hollow on the west side facing the sea. The highest point of the hill, some thousand feet above the plain, was occupied by the Acropolis. The northern extremity was the site of the royal gardens and the palace of the Attalid Kings. Next came the temple of Athena Polias, immediately above the theatre, which was formed in the natural hollow of the hill, facing westward towards the Aegean sea. At the further extremity of the ridge was the great altar of Zeus Soter. At the foot of the theatre ran a long terrace terminating at its north end in a temple built into the rock, and at its south end in a long portico; below this terrace the ground fell sheer away to the plain. The general result, as seen from the plain, was this: the Royal Palace and garden, the temple of Athena, and the immense Altar of Zeus formed one immense composition on the segment of a curve, lining the ridge and encircling the theatre in the hollow on the breast of the hill below; and then, to form a line of arrest, to check as it were the sense of slipping down the hill, the architects set this terrace along the face of the hollow. It was a great effort in civic architecture, memorable because it was something new to the world and because it led up to the monumental planning of Caesarian Rome."

The Altar of Zeus referred to was a colossal and simple structure. On a wide platform, with gigantic tiers of steps, was placed a huge rectangular block surmounted with a frieze seven and a half feet high and 400 feet long, illustrating the battle of the giants. This, as in the case of the Parthenon and most of the Greek temples, was designed to impress spectators at a distance, both by land and sea. The quality of its sculpture can be appreciated from the well-known statue of the "Dying Gladiator" or "Gaul," which came from this Altar. Pergamos is now in ruins, and the site was only recently discovered. Two Frenchmen have published some of those wonderful restorations of it for which their nation is so famous. But in the absence of these it is difficult to give a vivid impression of its wonderful planning. If Table Mountain were on



RESTORATION OF ACROPOLIS, ATHENS.

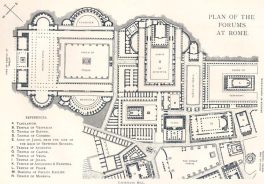


ACROPOLIS: SHOWING SIDE OF TEMPLES ON EDGE OF CLIFF.



BEIRUT, LEBANON.

PLAN OF THE FORUMS AT ROME

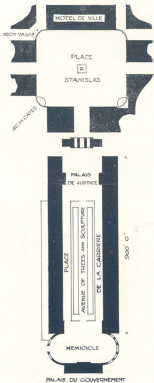


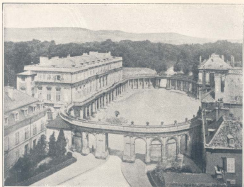
REFERENCES.

- A. Temple of Trajan.
- B. Temple of Saturnus.
- C. Temple of Solus.
- D. Temple of Castor.
- E. Area of Julia, with the site of the base of Severan Forum.
- F. Temple of Antoninus.
- G. Temple of Venus.
- H. Temple of Mars.
- I. Temple of Juno.
- K. Temple of Antoninus & Faustina.
- L. Temple of Peace.
- M. Basilica of Trajan Augustus.
- N. Temple of Mars.

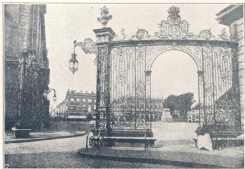
Plan of the Forum Buildings in the center of Imperial Rome.

NANCY

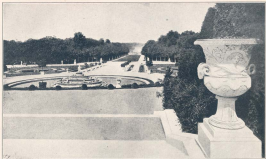




HEMICYCLE AT NANCY.



ENTRANCE TO THE PLACE STANISLAS, NANCY.



VERMONT: EXAMPLE OF GEOMETRIC PLANNING IN FRONT OF THE PALACE.

FRONT TO

THE PARK

FRONT TO
WESTMINSTER

FRONT TO

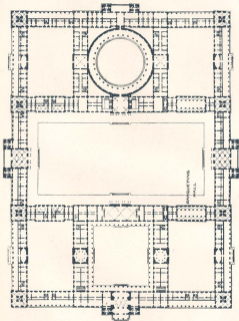
FRONT TO
CHAIRING CROSS

FRONT TO

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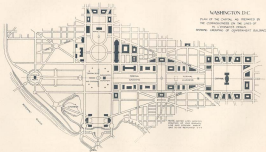
THE RIVER

1850 JOHN'S PULPIT OF WATERHALL THE ROSSITERING HALL ALONE WAS BUILT, AND STILL EXISTS.



WASHINGTON D.C.

PLAN OF THE CAPITAL AS APPROVED BY
THE ARCHITECTS ON THE 15TH OF
MAY 1800
FROM ARCHIVES OF GOVERNMENT BUILDINGS



CAPITAL TO RIVER—ABOUT TWO MILES.

a much smaller scale the temples might be imagined crowning the flat ridge of the mountain and the horns of its crescent, the Devil's Peak and the Lion's Head. But Table Mountain would dwarf any work of human hands which attempted to vie in scale with it. It would be easier to imagine a Pergamos or Halicarnassus growing out of any semi-circle of the cliffs that stretch from Muisenberg to Simon's Town, or rising from any of the encircling hills of Pretoria or Bloemfontein.

Another illustration of the "effect from a distance," and to me one of the most impressive sights in Greece, is the temple, a few huge white columns of which still remain, standing on Cape Colonna—the "Cape Point" of Athens. This is seen as you approach Athens from the sea.

The Romans, when they absorbed the wealth and art of the Empire of Alexander, were quick to realize the use to which the Greek genius for civic architecture, such as was displayed at Pergamos, could be put to in beautifying their own cities. Thus the "grand manner" became general in the public works of the far-seeing statesmen who organised and built the Roman Empire. Unfortunately we know little of the many new cities laid out all over the Empire by such imperial builders as Trajan and Hadrian, but we hear, for instance, of a double colonnaded street two miles long at Antioch, and of the architectural wonders of such remote cities as Palmyra and Baalbec. In Rome itself fora or colonnaded squares were planned on a large comprehensive scale. They were laid out along a central axis, symmetrically conceived, with domes, exedrae, and hemicycles balancing each other on either side; the fora being connected by archways down a long central vista. Thus their vistas were not such as we are accustomed to in our gridiron colonial streets, with nothing at the end to see but a maze of wires and poles, but were a continual perspective of alternate light and shade, with centralised features of beautiful architecture. In the illustrations some idea can be obtained of the scale by the dwarfing of the old Forum Romanum by the procession of the Imperial Fora. In the ruins of the Palace of the Caesars on the Palatine Hill examples of monumental planning can be seen to this day, but on a scale that no modern nation can ever hope to emulate for the homes of its rulers.

The Gothic period provides few instances of studied planning on a large scale. The ecclesiastical communities alone built for other purposes than defence. Yet the great religious

buildings, when designed as a whole, or built all at one time, were planned on systematic and, as far as possible, on symmetrical principles. The church itself was symmetrical, and the cloister, though placed at one side for seclusion, instead of at the entrance on the central axis, was not unlike its prototype, the Roman Atrium. The picturesque irregularity which the Gothic revivalists were apt to think the soul of Gothic architecture was generally the result of chance rather than that of intention. No one who knows well—to pick examples at random—the Doges Palace at Venice or that most historical of buildings, Westminster Hall, or as a smaller example the cloister of New College Chapel, Oxford, will believe that simplicity and unity of conception are more alien to the spirit of Gothic than of classic architecture.

No nation has ever surpassed the French in the faculty of placing buildings in orderly relation to each other and to their surroundings, so as to gain from them the maximum beauty of effect. Their buildings individually are not better than the English—many competent judges will say not so good,—but they have far excelled us in the effective disposition of them. Fortunately for France, the Romantic revival never extinguished the old traditions of art as in England. Besides Paris, the grace and dignity of which is too famous to need description, there is hardly a town in France which has not some civic distinction due to fine architectural planning. I am indebted again to Mr. Blomfield for a description of Richelieu. This village was built by Cardinal Richelieu—Armand Jean Duplessis, the greatest bearer of a name that has many representatives in this country. Wishing to impress his countrymen and foreigners who came to visit him with the dignity of his surroundings, he rebuilt the whole village as well as his chateau, to which it was attached. The ground plan of the village was symmetrical, the houses being arranged around two great squares divided and crossed by wide avenues of lime trees. At the four cross roads stood houses or hotels for his guests, which were higher than the other buildings, and if not quite symmetrical were of balancing architectural value. At the ends of the vistas down the roads were the gateways, a church, and the palace of the great Cardinal himself. Richelieu was built about 60 years before Van Riebeeck landed at the Cape, and was one of the first known attempts at systematic planning of a village, serving probably as a model for many

other French towns. I should be the last to undervalue the picturesqueness of an English or Normandy village, but Richelieu is valuable as an example of systematic dignity in building which, though it may be misplaced in an ordinary village, should be possessed in some degree by every town with a sense of its own importance.

But perhaps the most valuable example is Nancy. Originally it consisted of two poor towns separated by a wide untidy space (how suggestive of South Africa!). Stanislas, ex-King of Poland (father-in-law of Louis XV.), employed himself in honourable retirement by connecting the two and creating out of them a beautiful capital for his principality of Lorraine. He did not bring fashionable artists from Paris, but employed and educated local craftsmen. I am fortunately able to give an illustration of the plan and of some of the buildings of Nancy, so that its design will be more easily understood. It is an example of ground planning on the flat, as opposed to the hill sites of the Greeks. The plan well illustrates all that is implied by the "grand masses." It shows a vista of about 600 yards from the Hôtel de Ville to the Government offices—first through a large square; then between narrowing symmetrical buildings, through a triumphal arch, down a long row of stately buildings, ranged on either side of a double row of cleft lines, set as a background to rows of statuary; then again into the "hemicycle," which was formed by two semi-circular arcades, linking up with the Government offices at the far end of the vista. Every building has additional value beyond its own excellence, owing to its carefully studied position. The iron gateways, which were made by the local blacksmith, Lamour, to connect the open angles between the buildings in Place Stanislas, and the stone arcades of the Hemicycle are instances of the grace that can be obtained by thoughtful planning of a large group of buildings conceived as a whole. Wherever the eye turns it rests on something of interest and beauty.

I need hardly mention the great squares and open spaces of French towns, such as the Place de la Concorde and the Place Vendôme in Paris, or others at Bordeaux, Rennes and Bréviais. Is it too much to hope that our Government Square, Pretoria, may some day be rebuilt on such a restful and dignified plan? Or has the principle that "every Englishman's home is his castle" been carried so far that our public squares must never

express any nobler sentiment than the liberty of the individual, which, in fact, results in mere licence and restlessness?

England presents hundreds of examples of fine ground planning, introduced in many cases from Holland by William III., in her great country houses, but has few towns laid out with any architectural magnificence, with the exception of Bath, which was happy in its stone and in the period of its rebuilding, which took place during the culmination of classic taste in England.

A valuable lesson to us at the present time is Washington. When that capital was founded a French architect, L'Enfant, trained in the best period of the French school, was brought from Paris and made a design for the laying out of the Government Buildings and their surroundings. Unfortunately the Federal Government did not rise to the long-sighted views of L'Enfant. It may be supposed that in this case Washington and Hamilton did not exert their influence in favour of the big idea. Another architect was employed to carry out a very insignificant plan. A few years ago and a hundred years after the foundation of the city a commission of experts was appointed to draw up a comprehensive scheme for the best use of the site. This commission discovered L'Enfant's original plans, and reported that these could not be improved upon, even to meet the needs of the capital of a country that had grown so greatly during the century. The result has been that buildings have been purchased and pulled down, railways moved, and new stations built, at the expenditure of vast sums; all of which waste would have been saved if L'Enfant's plan had originally been adopted, as far as the national finances then permitted, and kept always in view as an ideal and stimulus for future efforts.

The old town of Amsterdam during the seventeenth century was enlarged and improved in a most effective way, by the addition of three semi-circular *grachten*, which earned for Holland's capital the title of "the Venice of the North." Again, if the plan made by Sir Christopher Wren for rebuilding London after the great fire had been carried out millions of money would have been saved, and the City of London would now be one of the most convenient and beautiful in the world. So too might Whitehall have been a glory to London had not the civil wars interfered with the fine scheme by Inigo Jones. The illustration shows a com-

prehensive plan for laying out the whole space between the Park and the river, Charing Cross and Westminster Abbey. Had this been executed we might never have heard of "Downing Street." Paris on the other hand, to its infinite gain, did take the fullest architectural advantage of the opportunity afforded it by the destruction caused during the Revolution.

In England there has been some justification for the more Romanesque and less classical principles of city and garden planning. For nature has fashioned the British Isles on so small a scale, and in such beautiful detail, every few square yards of them being of the most finely finished natural craftsmanship, that it must often seem sacrilege for the rude hand of the architect to disturb, even for the greatest architectural conception, so fair and perfect a work. Pope's epitaph on the architect, Vanburgh,

"Lie heavy on him earth for he
Laid many a heavy weight on thee,"

would have had less justification had such a pile as Blenheim been built in French or South African surroundings.

But in France, Italy and Greece Nature's handiwork is on a larger scale, and makes other demands on the human architect. This is even more the case in South Africa, which the Arch-Architect has designed so essentially in the "grand manner." Here the landscape is so bare in detail, and so vast and grand in its general features, that the design and disposition of buildings and their surroundings must be conceived on a monumental scale to be in harmony with the work of nature. Our cities and buildings—like our Constitution—should be conceived on a comprehensive scale and as a whole.

The "grand manner" does not necessarily imply extravagance. We cannot, it is true, build terraces two miles long, as Louis IV. did at St. Germain. But noble effects in laying out the great spaces of our cities can be obtained by inexpensive and simple means. An orderly and balanced disposition of buildings need not cost more than a disorderly and ill-balanced one. Expense may prohibit architectural features such as arcades, terrace walls, and balustrades, or wrought-iron work such as at Nancy, to link the buildings into an organised and beautiful whole. Yet, as less costly substitutes for these architectural features, there are always at the designer's hand formal lines and avenues of well-kept trees,

The northern architect in a dull or cold climate, and dim atmosphere, rightly seeks for wealth of detail and warmth of colour, on his chill and sunless façades. This is the explanation of the pleasure derived from the mixture of red brick and white stone on a building in England or Holland. But in the bright and warm atmosphere of South Africa we turn with relief from such parti-colour buildings to plain, cool stone walling or to the shadow-chequered whitewash of the old Dutch houses at the Cape.

In the newspaper criticisms of new buildings of South Africa they are often described as "of the Renaissance style." The real "Renaissance" style in the different countries of Europe, when architecture was being re-born and deserved this name, was an attempt, enthusiastic but often ignorant, to revive the forgotten forms of classic architecture. The earlier Renaissance architects were often pedantic imitators of detail, seeking the letter but missing the spirit; and if we go too much to them for our ideals to-day we are but copying the copyists, an unprofitable and hopeless task indeed. The great masters in the Renaissance period, such as Michael Angelo and our Wren, thought of detail as wholly subservient to the nobler principles of construction and planning. Through sincerity and faithfulness to the ideals which I have here tried to express lies the best hope that South Africa may give birth to a national architecture worthy of a great nation.

I would end with an appeal to our Government and educational bodies to remember that, though the best training ground for young architects and artists must be in England or northern Europe, where, mingling with their fellow students, they can catch enthusiasm (which Sir Joshua Reynolds said was of more value than the best teaching), yet the education of a South African architect cannot be complete without long study in Italy and Greece, where art flourished in countries and climates more similar to his own. The yearning for masses of superficial ornament and detail which is evidenced in most of our colonial architecture would disappear after a sound study of the classic masterpieces in the sun of southern Europe. The high quality of French architecture is largely due to the foresight of Napoleon, who acquired for France the beautiful Medici Palazzo on the Pincian Hill in Rome as a home for French students of art. There is a British school at Athens,

grass squares, clipped hedges, and pools of water, which the French and Italians knew how to handle so well in their bright climates in connection with their architecture.

Our early settlers, bringing their traditions from Holland and France, have handed down to us very noble examples of how to build South African homesteads. The characteristics of these are the central house, designed symmetrically with large and simple detail, and long and plain masses of roofing; the range of cellars and slave quarters balancing each other on either side, and the big grass squares and avenues and paddocks of oaks and fir carrying the masses and the lines of the formal architectural composition far away into the landscape. Thus these houses are excellent examples of the principles of the "grand manner" simplified to meet the needs and conditions of colonial life. The charm of these old Cape homesteads lies much more in these larger qualities than in their picturesque detail. This fact cannot be too much emphasized as a warning to imitators that unless they understand and work in the spirit of the old builders they will assuredly fail to advance and establish this or any other style in South Africa.

We hear much nowadays of an original South African style, but it will never be achieved through copying and imitating borrowed detail, but only through impersonal subordination to the larger ideals and conceptions of architecture. We must choose the primitive and more eternal instruments of the art of building, either using the column and lintel alone, as the Greeks did, or combining the column with the arch and the vault and the dome, as the Romans. Then we must use these features, or whatever other we may choose, sparingly and only where necessary, without fear of repetition, which is often the best means of obtaining that most valuable quality of architecture, namely, rhythm. We must welcome rather than shun bare wall-surface, which is a quality of all great architecture, though rare chances of it are given by the exigencies of modern buildings. "Great spaces washed with sun" are a characteristic of our landscape. It is the South African architect's privilege, and one much envied by his fellow craftsmen in northern Europe, to have always at hand the most valuable of all materials for his craft (which the Greeks and Romans also had), warm sun bathed wall surfaces contrasted with deep, cool shadows.

but until quite lately there was none at Rome. I can personally certify to the enormous help which such a school gives to a travelling student. Is it too much to hope that the new Government of South Africa may grant an annual sum—it need only be quite small—to these schools in Athens and Rome, in return for which genuine South African students of art working in those countries could claim as a privilege the great benefits which these schools have the power to confer?

HERBERT BAKER.

[I have since found further information about the beginnings of Washington. L'Enfant was not sent for from Paris, as he had fought through the Revolution. But in France he had been inspired by the work of the architect Le Nôtre, the great master of the "grand manner." He was assisted by Jefferson, the first Secretary of State, who had himself been an architect. Jefferson went to Europe and collected plans of the finest cities and buildings. These he sent to L'Enfant, who evolved with their aid and from long study the plan of the city that was at once original, practical and beautiful. The area embraced in the central scheme was about two miles long by one mile wide. In view of our solution of the Capital problem, Washington's instructions to L'Enfant may be of interest. He told him that "the Executive offices should be kept well away from the Federal House, to prevent members of Congress from too frequently visiting the Executive departments."—H.B.]