

PUBLIC BUILDINGS.

[To accompany report No. 20, of December 31, 1844.]

JANUARY 28, 1845.

Read, and laid upon the table.

Mr. PRATT, from the Committee on Public Buildings and Grounds, made the following additional

REPORT :

The Committee on Public Buildings and Grounds beg leave now to report further in reference to the proposed erection of a suitable edifice for the convenient accommodation of the business of the War and Navy Departments, and for protecting the public records and other public property, rendering the edifice fire-proof in all its parts. In connexion with this report, the committee now submit plans for the proposed structure, drawn by competent architects, pursuant to directions. These plans are marked A, B, and C. The one marked A exhibiting the proposed edifice on a larger scale than the others, but each showing the project in a different light as regards the other public buildings, and otherwise. It is deemed necessary, however, to cause but one of these plans (C) to be engraved in connexion with this report; the others being placed in convenient position at the committee room for ready reference by members who desire further examination of the diagrams. It will be perceived that the plan engraved herewith, represents the proposed structure for the War and Navy Departments, in connexion with the various edifices of the Executive square.

The destruction of the buildings formerly occupied by the Treasury and Post Office Departments, and also by the Patent Office—a destruction involving vast cost and incalculable inconvenience to individuals and to the government—furnishes solemn admonition against allowing the public records and other property in the departments from being any longer subjected to the danger of fire.

In addition to the warnings of prudence and economy—admonishing us against a recurrence of such calamities as destroyed the important edifices above mentioned—we have the strongest testimony from the heads of the War and Navy Departments, and from the chiefs of every bureau in those departments, (as is shown in the documents accompanying our previous report of December 31,) that about treble the present extent of rooms is absolutely necessary to accommodate the public officers in the convenient discharge of the public business in both departments.

The building proposed by your committee for the accommodation of the War and Navy Departments, is designed to correspond substantially in

its ground-plan with the edifice intended (when completed) for the accommodation of the State and Treasury Departments—flanking the President's grounds at their eastern and western extremities, as shown in the accompanying diagram, (C;) but the superstructure will conform to the architecture of the Post Office Department—admired alike for beauty and convenience.

But it is deemed needless to enlarge upon the subject in the way of argument. The concurrent testimony of the officers of the War and Navy Departments, as shown in the former report of your committee, demonstrates the indispensable necessity for increased accommodations; and what citizen will deny the propriety of rendering fire-proof all future erections of this kind, especially when he reflects on the vast losses and difficulties occasioned by the former Treasury and Post Office buildings and the Patent Office? A plain statement in facts and figures, derived from the testimony of the officers of the War and Navy Departments, elicited by the inquiries addressed to them by your committee, may be appropriately introduced here:

Statement of the number of rooms now occupied by the different bureaus of the War and Navy Departments, and the number required and to be provided for in fire-proof building.

I.—WAR DEPARTMENT.

	No. of rooms now occupied.	No. of rooms required in new fire-proof building.
<i>Bureaus in rented buildings, not fire-proof.</i>		
Chief Engineer - - - -	5	6
Topographical Engineer - - - -	7	9
Ordnance - - - -	6	8
Commissary General of Subsistence - -	3	5
Paymaster General - - - -	3	5
Pension Office - - - -	6	11
Surgeon General - - - -	4	5
Total number of rented rooms -	34	
<i>War Department building, not fire-proof.</i>		
Secretary's rooms - - - -	8	10
Commanding General - - - -	2	5
Adjutant General - - - -	5	8
Quartermaster General - - - -	5	7
Indian Bureau - - - -	8	9
Second Auditor - - - -	6	10
Rooms in all the buildings now occupied -	68	
Rooms required in new building - - -	-	98

STATEMENT—Continued.

II.—NAVY DEPARTMENT.

	No. of rooms now occupied.	No. of rooms re- quired in new fire- proof building.
<i>Navy Department building, not fire-proof.</i>		
Secretary and his clerks - - -	9	14
Bureau of Yards and Docks - - -	3	4
Bureau of Construction - - -	6	10
Bureau of Ordnance and Hydrography - - -	5	6
Bureau of Medicine and Surgery - - -	3	5
Bureau of Provisions, &c. - - -	3	5
Engineer corps - - -	1	2
Fourth Auditor - - -	7	15
Total rooms - - -	37	61

RECAPITULATION.

Grand total of rooms <i>now occupied</i> by officers of the War and Navy Departments, in <i>public and private</i> buildings, <i>none of which are fire-proof</i> - - -	105
Additional rooms <i>now required</i> in a new fire-proof building, for the safe and convenient discharge of duty by officers in those departments - - -	52
Whole number of rooms <i>now actually required</i> for the present business of the War and Navy Departments - - -	157
Whole number of rooms in the <i>north and south wings</i> proposed to be first erected in the plan of a building for the War and Navy Departments - - -	160

The whole edifice, when completed, will contain about 260 rooms, all of which will be wanted for the additional business of the two departments, before the lapse of time required in the completion of the *centre* of the edifice; which central part will contain about 100 rooms.

The structure will be four stories high, with rooms generally 18 by 22 feet, and 14 feet high. The whole length of the edifice, when the central building, as well as the wings, are completed, will be about 600 feet; corresponding nearly in length with the building for the Treasury and State Departments, when *that* shall be completed. Each wing will be about 200 feet long.

As a specimen of the statements from the heads of departments and chiefs of bureaus, elicited by the inquiries of your committee, the follow-

ing brief synopsis of the replies of those officers is now respectfully submitted in this connexion.

Colonel Totten, of the Engineer Department, says the office of the engineer corps "is in a very dangerous position as regards fire;" for, "though such precautions are taken within doors that it is next to impossible for fire to originate there, the danger from without is imminent." Colonel Totten recommends "the hiring, without delay, of some building less exposed to this danger," &c. "There is a vast amount of information confided to this depository, which is of a nature exposing it to daily reference and use, and of which the loss would be irreparable. As it cannot be stowed away in fire-proof storehouses, but must be kept at hand in the occupied rooms, the whole building should be secure; and, at any rate, until Congress shall provide apartments entirely safe, such a building should be occupied as will afford at least reasonable security against this danger." "The danger is so great, that I have felt it incumbent on me to lay the matter repeatedly before your predecessors." "It seems to me that there cannot be a doubt as to the propriety of enlarging the public buildings, on the score of *economy*. Those who have the means of calculating the relative *expense* under the two systems, are better able to speak touching that point than I am. As to *safety*, it is not possible to doubt that an immediate enlargement of the public buildings is of the highest and most pressing necessity. Much might be said on the score of *convenience*—not *personal* convenience, but convenience in the despatch of public business." "I trust Congress will not continue the present risk another session."

Colonel Abert, of the topographical engineer corps, says that his bureau is in a building unfit, leaky, and damp, with much exposure of valuable records. "The records and property exposed, under present temporary arrangements," says Colonel Abert, "are extremely valuable; and, if destroyed, could not be replaced in many years, nor without expending *many hundred thousand dollars*. True economy, therefore, would seem to be essentially involved in the early erection of adequate fire-proof buildings."

General Jesup, Quartermaster General, reports, that "additional rooms are required, not only for the transaction of business, but for the preservation of the plans, returns, and records of the office." "Most of the papers" he adds, "are now kept in a damp basement room, where, it is apprehended, they will be seriously injured, if not destroyed, in the course of a few years."

General Gibson, Commissary General of Subsistence, mentions that more room is required, and in better quarters, as the records are much exposed, and the building has been *on fire three times*.

General Towson, Paymaster General, says the building occupied by his bureau is neither safe nor convenient, and the records are much exposed to accidents from fire.

Colonel Talcott, of the Ordnance Bureau, mentions that the documents of that office are much exposed; and that, if destroyed, it would be exceedingly difficult to repair the loss and inconvenience.

J. L. Edwards, esq., Commissioner of Pensions, reports that the rooms occupied by his bureau are mostly uncomfortable and inconvenient. The records have to be stowed in a cellar, (under the office of the Secretary of War,) "so damp, that in summer it is found necessary to dispel the damp-

ness by fire." All the officers of his bureau, except two clerks, are in hired quarters.

Thus much for some of the officers quartered in private buildings, hired for their accommodation.

The officers occupying rooms in the War building itself, are equally emphatic in expressing opinions concerning the necessity of better means for preserving the public records, while most of them state that much additional room is required for the convenient despatch of public business.

Major General Scott remarks, that the rooms for the accommodation of his officers are "entirely insufficient;" and "the time of individuals having business with the commanding general is thus frequently lost, as well as public business most effectually retarded."

The Commissioner of Indian Affairs, T. Hartley Crawford, esq., remarks, that "the truest economy will consist in securing the public records against the possibility of destruction, although a larger sum of money may be expended than the principal of what is now used annually," &c. "In by far the most important requisite of a depository of public papers and records of inestimable value, and which, once lost, can never be replaced—in the security which ought to be afforded against destruction by fire—the rooms occupied by the Indian Office are utterly defective, being no more fire-proof than any other brick building in Washington, and only safer by reason of the watch which is kept over them."

Major Thomas, assistant adjutant general, says, "The records in the basement rooms, at present in good order, are becoming injured by dampness, and, like those in the attic, are inconvenient for reference." "For the safety of the records," he adds, "additional rooms are actually necessary; and it is all-important that any buildings which may be projected should be fire-proof. The records of the Adjutant General's office give the *military* history of every officer and soldier, and their loss could not be replaced. Not only would the loss of these records to the *government* be great, but likewise to *individuals*, as they contain facts scarcely elsewhere to be obtained, upon which unsettled claims for services rendered can be fairly adjusted."

In transmitting to the Committee on Public Buildings the replies from the several chiefs of bureaus in his department, the honorable William Wilkins, Secretary of War, remarked that he had "felt constrained to refer, in his late annual report, to the necessity of further accommodation for the bureaus and archives of this department." And he added, in his letter to Colonel Pratt, that, "in addition to the very great interruption and inconvenience to the public service, by having *the bureaus* of this department *scattered and detached* from the War Office in private buildings, (the annual expense for rent for these hired offices being \$3,350,) there is still a more important consideration—as *the hired buildings now occupied contain most important records, maps, plans and models, THE LOSS OF MANY OF WHICH COULD NOT BE REPAIRED.*" The condition of the War building itself, though "more secure (from being better watched) than ordinary brick buildings," is yet defective enough—as even it is not fire-proof, &c.

It will be seen that, in the above synopsis, we have confined our attention to the condition of the bureaus of the War Department. Are the bureaus of the Navy Department in much (if any) better condition?

The Secretary of the Navy, the honorable John Y. Mason, in his letter

to Colonel Pratt, after alluding to the reports from the chiefs of bureaus respecting the additional and fire-proof rooms required in that branch of the public service, invites the Committee on Public Buildings, "by a personal examination, to see the condition of the building occupied by this department—fully assured that *a more convincing proof* could not be given of the expediency (and, indeed, absolute necessity) of the additional room asked for."

The letters of Commodore Warrington, Commodore Crane, Commodore Shubrick, and of Messrs. Haswell, Harris, and Dayton, respecting the condition of their several bureaus, concur substantially with the statements already given touching the imperative necessity for apartments of larger size and proof against fire; and Commodore Morris, while acting Secretary of the Navy, in December, wrote that "the arrangements of the present building afford no effectual protection for the records and papers of the department against danger from fire, and the importance of such provision is too obvious to require any comment."

These statements present some facts which will probably surprise many of our fellow-citizens. It appears, for instance, that the War Department is now actually *paying rent* for as many additional rooms in private buildings as it has rooms in the edifice purposely erected for its accommodation! And for the whole number of rooms *hired* for the purposes of the War and Navy Departments, there is now paid an aggregate of rents amounting annually to several thousand dollars! This consideration is impressed upon the mind more strongly, by the fact that the scattering of the public offices among private buildings largely increases the danger of the public records from fire and other casualties; and it is sufficiently remarkable that not a single office of the War or Navy Departments, whether kept in public or private buildings, is fire-proof! Additional to all this, and worthy of much consideration, is the great inconvenience and loss of time in transacting business among offices and records scattered over various buildings, public and private.

It will be seen, by the estimates of Mr. Strickland, architect, that the probable cost of the north and south wings, which your committee recommend to be immediately commenced, will range from \$375,000 to \$480,000, according to the materials employed; that these wings, as shown on plan A, will contain 160 rooms of good size; and that the whole edifice, when the wings can be connected by a central part, to be erected when the present War and Navy buildings can be removed, will contain 264 rooms, all of them fire-proof, and built in the best manner. A large portion of all these rooms are actually required for the convenient and safe transaction of the present business of the War and Navy Departments; and it is evident that the increase of business consequent on the increase of our population, the extension of our government over the vast regions of Texas and Oregon, and other important causes, will require perhaps the whole of the increased accommodations before the expiration of the years required for the completion of the structure according to the project submitted by your committee.

The committee would respectfully recommend that suitable buildings be erected in the square opposite the President's mansion, for the residence of the several heads of departments.

With these remarks, your committee will close for the present, by referring your honorable body to the accompanying statements from Messrs.

Strickland and Mills, architects, whose talents have been invoked in exemplifying the plans of your committee for the proposed War and Navy edifice, in addition to the valuable assistance derived, and already published, from the chief and other officers of the Topographical Bureau.

LETTERS REFERRED TO IN THE PRECEDING REPORT.

From Mr. Pratt to Colonel Abert.

HOUSE OF REPRESENTATIVES,
Washington January 21, 1845.

SIR: Will you cause a plan to be drawn, for the Committee on Public Buildings and Grounds, of a fire-proof building for the War and Navy Departments, showing ground-plan and elevation, with estimates for the same, whether constructed of marble or granite. It is proposed by the committee that the building shall be made substantially conformable, in its ground-plan, to the Treasury building now partly completed; but that it shall, in its superstructure, conform more to the beautiful and convenient arrangement of the Post Office Department, in the size and height of the rooms, the width of the halls, &c. The location of the proposed building will include the sites of the War and Navy edifices; though the north and south wings, proposed to be erected first, will not interfere with those edifices at present.

More particulars will be communicated in verbal communications with Mr. Strickland, the architect.

I have the honor to be, respectfully, your obedient servant,
Z. PRATT, *Chairman.*

Col. J. J. ABERT,
Of the Topographical Engineers.

WASHINGTON, January 27, 1845.

SIR: In conformity with your call upon Colonel J. J. Abert, by letter dated January 21, 1845, I have, agreeably to his request, made a ground-plan and elevation of a fire-proof building, similar in dimensions, height of rooms, &c., to the General Post Office in Washington, and corresponding to the same structure in its exterior character.

Your plan for the War and Navy buildings I have endeavored to carry out by the accompanying drawings, by making north and south front wings 20 feet back from the line of the President's square, and running down 17th street about 600 feet.

I now proceed to give you an estimate of the cost of these buildings in granite, marble, and brick roughcast.

1st. If marble is used, as in the General Post Office, both of the wings (that is, the north and south buildings) will contain 160 rooms, of the size of 18 feet by 22 feet, and the height of the ceilings 13 feet in the clear; 4 stories in height, (the attic story to be lighted from the roof, for the purposes of drawing and mapping the various objects of the departments with respect to their bureaus,) will cost \$480,000.

2d. If these buildings are constructed with granite basements, marble columns and pilasters, cornices, steps, sills, and arched throughout in the manner of the Post Office, and the superstructure of the walls faced with bricks, and roughcast, or coated over with oil mastic, which is practised in Europe and in the Atlantic cities of this country, the cost of the two wings will be \$375,000.

The one wing on the Pennsylvania avenue, containing 56 rooms, and intended for the War Department, constructed as above, will cost \$187,000.

By referring to the plan, you will find that the present War and Navy Departments contain each 32 rooms—making 64 in all; 44 rooms are hired in private buildings, and a large additional number of fire-proof rooms are now actually required. In carrying out your plan, when there is a necessity from the wants of these departments, the entire accommodation will consist of 264 rooms, all of them fire-proof, and built in the most durable and substantial manner. When this is done, there will be a correspondence in the contemplated block of buildings with that of the Treasury, to the east of the President's house.

Respectfully submitted by your obedient servant,

WILLIAM STRICKLAND, *Architect.*

HON. Z. PRATT,

*Chairman of the Committee
on Public Buildings and Grounds.*

WASHINGTON, January 20, 1845.

DEAR SIR: In submitting the accompanying plans for the War and Navy fire-proof buildings, permit me to enter into some explanations and comparisons in connexion with other plans submitted for these buildings.

The character of design which I have had the honor to prepare, under the direction of your committee, embraces the idea of a connected building, as offering superior advantages for the transaction of the public business, and greater economy in construction, over detached buildings affording equal accommodations. To exemplify this, we will assume the dimensions of two buildings like those occupied by the departments, 160 feet long and 56 feet wide; the circuit of faced wall in both buildings would be 864 feet. Now, if we connect these two buildings together, end to end, we shall have one 320 feet in length and 56 feet in width; the circuit of faced walls of which would be 752 feet, or 112 feet less than the other, besides the saving of a thick end wall. This difference of 112 feet, if of cut stone, would amount to a considerable sum, but would be reduced if faced with pressed brick. Besides a saving in this respect, there would be a reduction in the number of windows and doors, and their ornaments, which, on two ends, would not be necessary in the connected plan. Upon the smallest calculation, therefore, the saving in these two plans of building would be equal to \$10,000.

There is another point of expense that I would call your attention to, connected with the proposed plan of detached buildings. It relates to the substitution of cast iron in place of brick arched floors. If this plan should be recommended on the ground of economy, it will be found, by a comparison with brick arches, that the iron floors will cost at least one-third more than the brick, which, in the final estimate of the building, would

amount to \$10,000 more. Here, then, are two items in the plan of the separate buildings, which would increase the cost over the other plan \$20,000. Economy, therefore, could not enter into the calculation of detached buildings in place of those connected. There is another and more serious objection to the use of cast iron in the way proposed, from its known powers of expansion and contraction by a change of temperature. This quality in the iron would endanger the safety of the buildings; and some sad evidences of this are on record, where the walls of a large theatre were thrown down by the expansion of its iron roof; and the dome of a large conservatory fell in from the same cause—both in London. Floors made of this material would be always in motion, and cracks would be always opening and closing where the iron joins with other materials.

But there are stronger grounds in favor of the connected building, not only from its facilitating the public business, by the proximity of the office rooms to each other, but by its producing that architectural harmony which the dignity of the building demands. And then, again, there should be some similarity in general outline with the other department buildings on the opposite side of the square, that when the whole square is laid down in plan, there should be no discrepancy of design observed. You may imagine how strange such a plan would appear if it should represent a connected structure on one side, and four detached buildings in a row on the other.

In the diagram plan No. 1 of the Executive square, annexed, I have represented the relative positions of all the buildings upon this square with each other. The position of the proposed War and Navy buildings is assumed to bear the same with that of the Treasury and State buildings, viewed from the President's house as the centre of the square. To these buildings is given the same general outline of plan with those on the opposite side of the square. For a fitting variety in architectural effect, there is a change in the detail, which diagram plan No. 2 will exhibit.

It will be seen, in the location of these buildings, that a special reference is had to keep the view open, to and from the main fronts of the President's house, of all the avenues of approach to the same; the diverging lines north and south relatively of the Pennsylvania and New York avenues just touching the upper angles of the building, presenting a front from south to north, when the whole shall be completed, of about 500 feet—the length of the celebrated Parthenon at Athens. This position brings all the buildings into harmony with each other, as determined by the great avenues of approach to them from the NW., SW., NE., and SE., and seems to have entered into the original plan of the ingenious L'Enfant, when he designed and laid out the plat of the city. These lines of demarcation, formed by the main avenues leading to the President's house, were to be those within which the public buildings erected there should be kept; they could and should be brought up to touch them, that such may be rendered more conspicuous, and their architectural beauties better displayed. There is no reason why they should be kept back of these lines, on the ground of covering a portion of the ends of the President's house, because, in any event, the private houses on the opposite corners of the avenues will do this; and if the public building here is kept on this line, it will be seen to the best advantage, and the President's house will in every case form a beautiful object on the back-ground of the picture.

I have touched on this subject, my dear sir, to show the warrant which would justify the locality of the south wing of the Treasury building, which has one corner encroaching on the north line of the Pennsylvania avenue drawn to the SE. corner of the President's mansion. There was an oversight on the part of the committee of the House that determined the site, and the extent of building which should be constructed on it; and hence the cause of the small encroachment of the south wing noticed above. In the future extension of the Treasury building north, its colonnade may be carried on to fill up the entire space, or to touch the south line of the New York avenue, as in the plan of the buildings on the other side is shown.

The diagram No. 2 exhibits a plan of the proposed building for the War and Navy Departments, as carried out to completion. The elevation on the same drawing shows its western façade, which presents in the centre an octostyle portico 80 feet front, and at each end a hexastyle screen of columns 60 feet front, with their entablature and blocking, all elevated on a high channeled basement, rising three stories above a sub-basement. The spaces between the porticos are ornamented with coupled pilasters of the same order with the columns, which divide the series of triple windows lighting the several stories. The plan is so arranged as to admit of the construction of such parts as will not interfere with the use of the present building during the progress of the new. The south building, referred to in the bill reported by your committee, will be located so far from the present Navy building, that its wing will or may not touch this building. The accommodations furnished by this south building will be 30 rooms on each floor, or 90 rooms on three floors, besides the basement—every room in the building, to be made fire-proof. As respects the material for the facing of this building, we may infer from the finish of the other fire-proof edifices in this city, that cut stone will be used; and it is subject to calculation which of the materials, freestone, granite, or marble, will be found best adapted or most economical. The cost of the General Post Office building, compared with that of the Treasury and Patent Office buildings, foot for foot, will differ very little, the difference in the architectural finish being allowed for. This can be accounted for from the fact, that in the former building the marble facing does not average more than nine inches thick; while in the latter buildings, many of the cut-stone blocks run through the whole thickness of the wall, from 2 to 2½ feet deep. This would operate in favor of the marble for facing the buildings outside.

Respectfully submitted.

ROBERT MILLS,
Architect.

HON. ZADOCK PRATT,
*Chairman of the Committee
on Public Buildings and Grounds.*