

REPORT OF A BOARD OF INQUIRY INTO THE CAUSES OF
INTERIOR DEPARTMENT FIRE.

M E S S A G E

FROM THE

PRESIDENT OF THE UNITED STATES,

TRANSMITTING

To the House of Representatives the report of a board of inquiry to examine into the causes of the fire which destroyed a part of the Interior Department building.

OCTOBER 17, 1877.—Referred to the Committee on Appropriations and ordered to be printed.

To the Senate and House of Representatives :

I have the honor to transmit herewith the report of a board of inquiry appointed by the Secretary of the Interior to examine into the causes of the fire which destroyed a part of the Interior Department building on the 24th of last month.

R. B. HAYES.

EXECUTIVE MANSION,
Washington, October 17, 1877.

DEPARTMENT OF THE INTERIOR,
Washington, October 12, 1877.

SIR: I have the honor to submit herewith the report of a board of inquiry appointed by me to examine into the causes of the fire which destroyed a part of the Interior Department building on the 24th of last month. (Exhibit A.)

The board conducted their inquiry with diligence and circumspection, and examined a large number of witnesses. The opinion expressed by the board that the fire was caused by sparks or burning cinders from a flue igniting a wooden grating with which the gutters on the roof were covered, seems to be well supported by the testimony.

I also submit the report of a board of survey appointed by me "to examine into the condition of the Interior Department building damaged by the recent fire; to report what temporary measures, if any, should be taken to secure the walls from further damage by the elements, to examine the roof of the south and east wings, and report whether, in their judgment, it should be replaced by another to prevent further injury by fire, and to make any suggestions or recommendations regarding

the reconstruction or repairs of the building which they might deem advisable."

Brevet Maj. Gen. M. C. Meigs, United States Army, Mr. Edward Clark, Architect of the Capitol Extension, and Mr. Adolf Cluss, architect and engineer, kindly consented to serve as members of the board, and from their report (Exhibit B) it appears that the walls of the burned portion of the building are, on the whole, in a safe condition, needing only, during the coming winter, a covering against rain and snow, of rough boards or of tarpaulins, painted water-proof canvas.

Measures have been taken for the temporary protection of the building.

After the fire, the burned portion was found encumbered by an immense mass of *débris*, the greater part of which had to be removed before the erection of a temporary roof could be proceeded with. This removal was rendered especially difficult by the necessity of disentangling and cutting to pieces a large number of heavy iron beams and rafters which had been precipitated on the floors in confused heaps, and many of which were still fastened in the walls. The *débris* is now removed and the temporary roof has been completed.

The office-rooms on the first floor of the west and north wings of the building were more or less damaged by water. In most of them the ceilings, and in some of them the walls, require new plastering. It will also be necessary to repair many of the flues before the permanent restoration of the building is begun.

I herewith submit an estimate of the cost of the removal of the *débris*, the erection of temporary constructions, and the immediate repairs which were rendered necessary by the fire, and which in part have already been executed. An item of contingent expenses has been added, for the reason that a more minute inspection of the injured portion of the building may still develop the necessity of immediate repairs thus far unnoticed.

Many of the office-rooms on the first floor of the west and north wings having become unfit for use, I found myself obliged to establish a part of the clerical force of this Department in some outside building. The renting of such outside buildings is prohibited by law, but when Mr. John W. Wright, of this city, offered to me the use of his premises on the northeast corner of G and Eighth streets, on the terms indicated in the letters herewith submitted, (Exhibits C and D,) I considered myself justified by the stress of circumstances in accepting his offer. I would therefore respectfully recommend an appropriation for rent to be paid to Mr. Wright, at a rate not exceeding that paid to him when his building was occupied by the Bureau of Education, viz, \$750 per month. It is hoped that all the office-rooms in the Interior Department building, which have been vacated in consequence of the fire, will, within a short period of time, be so far repaired as to be fit for their accustomed use. The occupation of Mr. Wright's building will then be dispensed with.

I fully concur with the suggestions and recommendations made in the above-mentioned report of the board of survey (Exhibit B) as regards the permanent restoration of the Interior Department building and the replacing of the roof covering the east and south wings by a new one. The necessity of a really fire-proof construction requires no further argument. It has been sufficiently demonstrated by sad and costly experience.

The suggestion of the board, that another building be constructed across the court-yard running north and south, has also my earnest approval.

Two of the bureaus of the Interior Department—those of Pensions and of Education—are now located in another part of the city. The Secretary's Office, the Patent-Office, the General Land-Office, and the Bureau of Indian Affairs, crowded together in the Interior Department building, are seriously suffering from want of room. Many of the halls and corridors are lined with book-cases, containing very valuable records and papers. The loft under the roof of the F-street portico, described in the report of the board of survey as dangerous to the safety of the building, is filled with files of papers, because for those files no other room can be found in which they can be so arranged as to be accessible. An enlargement of the building seems, therefore, imperatively necessary, for it is certainly not conducive to a proper conduct and supervision of the business of this Department to have its offices still more scattered over the city than they are now. The constant necessity of conference and co-operation of the heads of bureaus and the head of the Department renders it, on the contrary, most desirable that all the offices should be under one roof. A central building, as recommended by the board of survey, would measurably satisfy this pressing want. It can be added to the existing edifice without marring its beautiful proportions. It can furnish a basement for the preservation of records and papers not constantly in use, and office-rooms enough to permit the return of the Pension-Office and the Bureau of Education to their proper places.

I recommend that provision be made for the construction of such a central building, as well as the restoration of the model-halls, and that a competition of architects be invited as to plans, specifications, and estimates.

I also submit the reports of the Commissioners of the Patent-Office, the General Land-Office, and the Bureau of Indian Affairs, (Exhibits E, F, and G,) stating the loss and injury of records, papers, and other material of their respective bureaus, caused by fire and water. It appears therefrom that the destruction of patent-models by fire has been very large and to a great extent irreparable, but that the books, records, and papers of the Department have suffered very little damage. Only about thirty patented drawings were lost by fire in the model-room which cannot be restored. The hurried removal of records and papers to places of safety on the day of the fire, and the consequent mingling of papers belonging to one bureau with those belonging to another, caused some temporary confusion, which, however, considering the immense accumulation of material in the Department, turns out to be far less extensive and embarrassing than might have been expected.

The severe rain-storm which occurred on the 4th of this month, and about the disastrous effects of which on the contents of the building alarming reports were circulated, did no damage to the records and papers of the Department at all. On the whole, it is a matter of congratulation that the great disaster which has befallen us left untouched that class of documents the loss of which would have gravely imperiled private rights and interests, and embarrassed the conduct of public business.

It gives me the sincerest pleasure to state that the officers and employés of the Department have in this trying emergency shown a devotion to duty deserving the highest praise.

I have the honor to be, sir, very respectfully, your obedient servant,
C. SCHURZ,

Secretary of the Interior.

The PRESIDENT.

EXHIBIT A.

WASHINGTON, D. C. *October 7, 1877.*

SIR: We have the honor to submit herewith a report showing the result of our investigation into the origin of the fire in the Interior Department building on September 24, 1877.

Very respectfully,

M. D. BRAINARD,
AMOS HADLEY,
WM. REED,
Board of Inquiry.

Hon. CARL SCHURZ,
Secretary of the Interior.

Hon. CARL SCHURZ,
Secretary of the Department of the Interior:

SIR: The undersigned board of inquiry, appointed by your order of the 26th ultimo for the purpose of examining into the cause of the fire in the Interior Department building on the 24th ultimo, have the honor to report that we have performed that duty by examining a large number of witnesses, whose testimony, covering several hundred pages, is herewith submitted.

In order that no fact or circumstance pointing to the probable origin of the fire might escape our attention, we have examined all of the employés of the Department, and others whose names we could obtain by diligent inquiry, who were acquainted with the construction of the burned portions of the building, or who were upon the roof on the morning of the 24th ultimo, either before or after the fire was discovered.

We have also examined the day and night watchmen who were on duty in the building on the day preceding the fire, (Sunday, September 23,) and find that no person entered the building who was not authorized to do so by a departmental pass.

The annexed schedule, marked "Exhibit No. 1," shows the names of the watchmen on duty and the several posts to which they were assigned.

Exhibit No. 2 shows the names of clerks and employés who entered the building on the Sunday before the fire, and also those who entered the building on the morning of the fire before office-hours.

As many theories as to the probable origin of this fire have been advanced, we think it proper to briefly notice some of the most plausible of them in this report.

At the outset, we deem it advisable to direct your attention to the materials out of which the Ninth-street wing of the building was constructed, as this was the part of the building where the fire originated. The roof was what is commonly known as a "truss roof," and the tie-rods, rafters, braces, and struts were iron. The purlines, trusses, sheathing, and ceiling were constructed of pine wood. The pine sheathing of the roof was covered by sheet-copper about one-fortieth of an inch in thickness. The tops of the chimneys were of iron set upon the brick wall over the flues, about 12 inches below the roof, and extended above the roof about 2½ feet. Over the gutters, running around the entire wing, was placed a pine-wood grating to keep them from clogging up with snow and ice in the winter-season, and to protect them from the heat of the sun in summer. This grating was made of inch boards,

fastened together by cross-pieces of 3 by 2 inch material, and was constructed in sections of about 10 feet in length by 4 feet in width.

The drawings hereunto attached, and marked "Exhibit No. 3," are true copies of the original plans of the roof of this wing of the building. On the south end of the roof of this wing a conservatory or hot-house, about 65 by 35, was located for the purpose of preserving plants in the winter-time. The walls of this room were made of seven-eighths inch boards, tongued and grooved; the floor was made of planks resting on the ceiling of the model-room, and was covered with zinc, and the roof of the room was glass. Wooden shelves were arranged for the accommodation of the plants, and there was a small tank from which necessary water was obtained. The only door leading into this conservatory was on the east side of the roof. North of this conservatory, and immediately under the roof, extending up to G street, was situated what was known as the rejected-model room of the Patent-Office.

The testimony shows that three rows of shelves of rough boards were erected on each side of the center of this room for the entire length thereof, and many thousand models of all classes and descriptions were stored thereon, besides a large number which were not on the shelves but piled up indiscriminately immediately under the roof of the building.

Boxes, paper bags, envelopes, and postage-stamps, together with textile fabrics and all sorts of inflammable materials, were stored in the room near where the fire originated, but it does not appear that any chemicals were included in this miscellaneous collection.

We will now examine in the light of the testimony before us some of the theories as to the manner in which this fire originated.

1st. Did the fire originate from the spontaneous combustion of chemicals stored under the roof in this rejected-model room? With reference to this theory we think it only necessary to state that the testimony shows that all chemical and other substances likely to ignite without the actual presence of fire, were removed from this room many months before the fire occurred.

2d. Did the fire originate from the carelessness of persons engaged in repairing the roof? With reference to this theory the testimony shows conclusively that no repairs had been made on the roof for a week prior to the fire.

3d. Did the fire originate from the heating apparatus in the conservatory on the roof? This theory is as readily exploded, as the testimony shows that this apparatus had not been heated since last spring.

Having briefly reverted to the only theories advanced as to the probable origin of the fire which in our opinion are at all deserving of attention, we now come to what we consider the true cause thereof, viz :

We find from the testimony that about 9.30 o'clock on the morning of the 24th ultimo, a fire was built in room No. 187, in the basement of the Ninth-street wing of the building, by Henry F. Brandeburg, a laborer in the Patent-Office, at the request of the lady copyists employed in said room, for the purpose of removing the dampness therefrom. This fire was built of pine boards and a blower was placed over the grate, and it is shown by the testimony that the roaring of the fire excited the attention of the persons employed in the room and was the subject of comment by them at that time. The smoke from this fire passed up through the third flue from F street on the Ninth-street wing.

The testimony of Messrs. Sibley, Tipton, Smith, Dailey, Ramey, Churchill, Hopkins, and Long, who were upon the roof some time before the alarm of fire was turned in, shows that a section of the wooden grating covering the gutter on the roof, and lying immediately against

the flue from which said smoke issued, was found on fire and was thrown off the roof into the yard on Ninth street by Sibley and others.

We think there can be no doubt but that this dry pine grating was set on fire by sparks or burning cinders which came up through this flue.

The amount of this grating which had been burned at the time the witnesses discovered it is variously estimated by them, but we conclude that not less than 30 square feet of boards had been destroyed. The witnesses state that they found a large quantity of live coals lying on the roof and in the gutter, and that the copper was so intensely hot that it had changed color, and in some places sunk down as though there was a hole underneath. This intense fire on the roof of the building was separated from the dry pine-wood sheathing underneath by the copper roofing, which, as before stated, was only about one-fortieth of an inch in thickness, and was lapped and soldered together along the gutter with common solder. The boards under the roof did not fit sufficiently close together to exclude the free circulation of air, and we are of opinion that, owing to the amount of fire on the roof and the thinness of the copper roofing, the board sheathing underneath took fire, and, communicating to the paper and other inflammable materials stored in the immediate vicinity of this grating in the rejected-model room, had gained uncontrollable headway before any one in the building was aware of the danger, and some time before the alarm of fire was turned in.

Several ladies who were employed in the west wing of the model-room testify to smelling smoke between 9 and 10 o'clock on the morning of the fire, but as the windows were open and the wind was blowing from the southwest, we conclude that this smoke came from the chimneys of other buildings in the vicinity.

Several persons testify to seeing smoke arising from various parts of the roof long prior to the alarm of fire, but as there were four fires built on the Ninth-street side on that morning, they undoubtedly saw the smoke from one of the chimneys.

After the most careful and searching investigation, we find nothing to warrant the belief that the fire was incendiary, but, on the contrary, all the facts and circumstances show that it was accidental and had its origin in the manner above stated.

Before closing this report, we consider it our duty to call your attention to the condition of several of the chimney-flues under the roof of the Seventh and F street wings of the building, which appear, from personal inspection, to have been defective and unsafe for a long time, and which, if not speedily repaired, may be the cause of further disaster.

We submit herewith four photographic views of the burned portions of the building from various stand-points, which are marked, respectively, Exhibits 4, 5, 6, and 7. We also submit a diagram of the roof of the building, showing the burned portions thereof, the position of the conservatory, and the chimneys from which the smoke of the several fires issued, the location of the rejected-model room, the position of the burning grating, &c., which is marked "Exhibit No. 8."

We have the honor to be, very respectfully,

M. D. BRAINARD,
WM. B. REED,
AMOS HADLEY,
Board of Inquiry.

EXHIBIT B.

WAR DEPARTMENT,
 QUARTERMASTER-GENERAL'S OFFICE,
 Washington, D. C., October 3, 1877.

To the Hon. SECRETARY OF THE INTERIOR :

I have the honor to transmit herewith the report of a board, instituted by your letter of the 1st October, to examine the Patent-Office and Interior Department building and to advise on its reconstruction and alteration where not fire-proof.

I also inclose a rough sketch of the method of reconstructing the model-rooms lately burned out, as recommended in the report.

Very respectfully, your obedient servant,

M. C. MEIGS,
 Quartermaster-General, Brevet Major-General, U. S. A.

Proceedings of a board of survey under the following letter of the Secretary of the Interior :

“ WASHINGTON, D. C., October 1, 1877.

“ A board of survey to consist of Brig. Gen. M. C. Meigs, Quartermaster-General, U. S. A.; Mr. Edward Clark, Architect United States Capitol; Mr. Adolph Cluss, architect and engineer, is hereby constituted, to examine into the condition of the Interior Department building, damaged by the recent fire, and report what temporary measures, if any, should be taken to secure the walls from further damage by the elements. The board will also examine the roof of the south and east wings, and report whether, in their judgment, it should be replaced by another to prevent further injury by fire.

“ The Secretary of the Interior would be pleased to receive any suggestions or recommendations from the board regarding the reconstruction or repairs of the building they may deem advisable.

“ A. BELL,
 “ Acting Secretary.”

OCTOBER 1, 1877.

The board met at the Interior Department at 1.15 p. m. and organized. Present, all the members.

Mr. Clark, having an engagement with the board on public buildings, lately constituted by the President of the United States, excused himself; and it was resolved that the board, when it adjourned, should adjourn to to-morrow, at 10 a. m.

The other members then resolved to visit the building of the Patent-Office, in order to make a preliminary examination. They visited the burned halls and the roof.

Adjourned.

OCTOBER 2.

Board met at 10 a. m. at the Interior Department.

All present.

Proceeded to make a careful inspection of the building. Found some cracks in the partition-walls of the north wing—principal story—caused, according to testimony of persons who were present during the conflagration, by the heating of the iron and brick work which forms the floor

of the north model-room, and the fall thereon of the iron trusses and half-burned timbers and covering of the roof. The board agreed in these conclusions. The cracks are insignificant, and will not affect the safety or permanence of the building. They need only to be pointed up and painted over.

The board then proceeded to examine the walls of the burned portion of the building from above. The walls of the north wing show very slight deviations from straight lines on sighting along the outer edge of the blocking which crowns them. The north wall of court-yard shows a deviation to the south in the center of $1\frac{1}{2}$ inches in a length of 268 feet and a height of about 50 feet; a similar convexity toward the north in the blocking on the portions of the north or G-street wall, between the central portico and the east and west wings, is perceptible, but the board are of opinion that in this case the blocking alone has been slightly moved, its lines are irregular, and that the walls have not moved materially. This deviation in walls—which, including the pilasters, are over 4 feet thick and 50 feet high—is not sufficient to cause any apprehension for their safety or any doubt of their ability to support any superstructure likely to be put upon them.

The board then examined the roof of the south and east wings. These roofs are of thin sheet-copper, laid upon 1-inch pine sheathing-boards, which are supported by pine joists, all resting upon groined arches, which form the ceiling of the south and east model-rooms.

The roof of the south portico extends over the whole portico. Within it is a large room with wooden floor underneath, which is the lath-and-plaster ceiling of this portico. It is covered by a roof similar in construction to that of the south and east wings, but lathed and plastered on the lower surface. This room is filled with many tons of documents, resting on the shelves of white-pine file-cases. A stove stands in this room, in which, as the day was warm, was no fire. Yesterday, General Meigs and Mr. Cluss saw in this room workmen engaged in packing in large bags for removal a large quantity of these documents, which were heaped indiscriminately upon the floor, and in the immediate vicinity of the stove. Such a use of this space in a wooden roof is undoubtedly very dangerous.

In another space under the roof of the south wing, at its east end, is the work-shop of a model-repairer. In this is a stove. Two wooden floors and two flights of wooden stairs, leading to the roof, make this a veritable tinder-box in communication with the whole space under the roof of north and east wings. This is also a present danger.

Through the space between the upper surface of the groined arches of ceiling of model-room and the wooden joists and sheathing of these roofs pass many smoke-flues. The smoke of the recent conflagration has penetrated everywhere beneath these roofs, whose timber and wood-work are blackened with soot, smell strongly of fire, and are in a very ignitable state.

It would probably be a wise precaution to give this wood-work immediately a heavy coat of soluble glass, silicate of soda, to protect it from danger of ignition from any spark escaping from any imperfect joint in the numerous smoke-flues.

The board is of the opinion that the safety of the building requires the removal of these roofs and the substitution of others of absolutely fire-proof construction.

The plan for a temporary roof within the walls of the ruined model-room, designed by Mr. Clark, being examined by the other members of the board, they agree in recommending its immediate construction, with

a single modification, which is to make the gutter V-shaped, or with sloping sides, so as to avoid all danger of its being burst by expansion of ice in cold weather.

The brick-work of the upper surface of the walls should be repaired where smoke-flues pass out of them. The only protection they will need this winter is a covering, against rain and snow, of rough boards or of paulins, painted water-proof canvas. In reconstructing the roofs of south and east wings, the board recommends that the roofs be made of rolled iron H-beams, filled in between with brick-work, or with perforated bricks or tiles, in some of the common forms to be found in the market, over all which corrugated sheet-copper, to keep out water, should be laid on the masonry; such copper is used in the roof of the northern portion of the General Post-Office.

That the H-beams rest upon cross-walls of brick-work, placed over the lines of the piers of the groined arches of the ceiling of model-rooms. These cross-walls should be so arranged as to divide the space into tight, separate rooms, communicating only by double wrought-iron doors, with air-spaces between. In order to make this space more useful, and to improve the discharge of rain-water, the pitch of the roof should be made somewhat steeper, and the eaves thereof should be placed at such a height as to permit the eave-trough to rest on top of the blocking course.

This construction will give a large space for the storage of files, in which, being between a brick floor and a brick and iron roof, and separated into rooms or cells of moderate dimensions, documents may be stored without danger to the model-rooms. If the slope of the roof as reconstructed is sufficient to permit it, slate laid in mortar may be used with advantage as the outer covering instead of metal. Slate does not require the constant presence of the plumber and sheet-metal worker, signs of whose work are visible all over these roofs. Most public buildings in Europe have suffered from the plumber's portable furnace.

It will be proper to level or terrace the upper surface of the groined arches, and in this operation open brick-work may be used for economy of material and to avoid greatly increasing the load on the piers.

In restoring the north and west model-rooms, the board recommends that these be arranged as basilicas, each with nave and two aisles, with two longitudinal ranges of brick columns, at a suitable interval, in the middle; these columns to support longitudinal brick arches on which rest walls going up to the slopes of the roofs. That the roof and ceiling be of brick or tile, 9 inches thick, set in cement and supported between sloping rolled iron H-rafters; those covering the outer aisles to rest upon the top of the outer walls and in holes in their inner walls, above the arches and columns.

That the middle aisle be roofed with similar beams and brick-work, resting upon the two middle aisle-walls over the columns and arches, which walls should rise above the slope of the roof of outer aisles, and have windows forming a clerestory. The columns should be of hard brick, set in cement and plastered, as resisting fire better than any stone or metal. The roof of the middle aisle will need tie-beams, which should be of rolled round iron of sufficient dimensions not only to resist the thrust of the roof but also to have surplus material, so as not to be readily overheated in case of fire among the models or any other material or goods which may be stored in what have been the model-rooms. These halls will have much more space and storage of models than before the fire, as they will be lofty enough to admit of three tiers of cases instead of two, and of two galleries instead of one. They will also be better lighted.

It is to be remarked that this building is designed to stand for cen-

turies, and that any of its rooms may in time be devoted to very different purposes than those for which it was originally built. When it was constructed no one contemplated that the space within the roofs, lately destroyed by fire, would be used for storage of immense masses of combustible materials, models, and files of papers and engravings, nor was any means of ready access to the interior of the roof lately destroyed then provided.

The exterior walls should be cleaned; they are but little defaced by smoke. A few blocks of marble it may be, possibly, necessary to replace, but only a few if any.

The slight rounding of the edge of a window does not injure the stability of the building, and in so large a building is not an obtrusive injury to the appearance.

If the roof be placed at such height as to allow the eaves-trough to be on top of the blocking-course, it will not be necessary to renew the course. Some of the stones of which it is composed are injured by heat, but only on the inner side, which will be covered by the brick-work when raised to the proper height.

As space is evidently already much needed to accommodate the great and growing business of the Patent-Office and of the Interior Department, which has, in fact, compelled the dangerous use of the spaces within the roof for storage of combustible materials, the board suggests the propriety of constructing another building across the middle of the court-yard, running north and south, to consist of the same number of stories as the present fronts and wings, to have a central corridor and two rows of rooms on each story, and to be of fire-proof construction.

It will not only give much needed office and file rooms, but it will greatly facilitate communication and circulation throughout the building, saving many steps. The two court-yards which will then exist will be of dimensions which can be readily roofed with iron and glass, which will make it possible to use all the lower portion of them for storage of models, papers, &c.

M. C. MEIGS,

Quartermaster-General, Brevet Major-General, U. S. A.

EDWARD CLARK,

Architect United States Capitol.

ADLF. CLUSS,

Architect and Engineer.

EXHIBIT C.

WASHINGTON, D. C., *September 25, 1877.*

SIR: If you should need additional office-room since the fire, I hereby offer you the use of my building, corner Eighth and G streets, northwest, for such period of time as the same may be necessary for purposes of your Department, the same to be determined by you upon ten days' written notice; and I agree to accept such compensation for use of the building as may be determined by Congress, provided that upon termination of the occupation of the building by your Department the same shall be delivered up to me in the same condition that it now is, ordinary wear and tear and damage by the elements excepted.

Very respectfully,

JOHN W. WRIGHT.

Hon. CARL SCHURZ,
Secretary of the Interior.

EXHIBIT D.

DEPARTMENT OF THE INTERIOR,
Washington, September 29, 1877.

SIR: I have received your letter, dated the 25th instant, tendering me for the Government the use of your building, situated at the corner of Eighth and G streets, northwest, in this city, for office-rooms, made necessary by the late fire, without compensation, unless an appropriation therefor shall be made by Congress.

I accept, in behalf of the Government, the use of your building for occupation on the terms and conditions named in your letter, and will recommend to Congress that an appropriation be made to suitably compensate you for the use of your building for such time as its occupation may be deemed necessary.

Very respectfully,

C. SCHURZ,
Secretary.

JOHN W. WRIGHT, Esq.,
Washington, D. C.

EXHIBIT E.

UNITED STATES PATENT-OFFICE,
October 12, 1877.

SIR: In compliance with your circular of the 10th instant, I have the honor to make the following statement regarding the losses incurred during the recent fire and storm, especially with reference to the records of the office.

The severest loss is obviously that of the patented models of which about 87,000 were destroyed. The classes and their subdivisions are indicated in the printed slips inclosed herewith.

Many of these models were doubtless of no value. Of the value of others no estimate can be made; many of them can undoubtedly be reproduced by the inventors from the same patterns from which the originals were made, but under the law these reproductions would be of no legal value for court or office purposes.

As illustrations of American invention a large museum might be stocked with such restored models, should the inventors think it desirable to furnish them.

In the west hall were several thousand models in what are known as "pending" and "issue" cases. The former belong to applications still pending in the examiners' rooms, the crowded condition of which requiring the models to be frequently cleared out and stored away from public observation, the latter to cases allowed by the examiners, and were awaiting the payment of final fee and issue of the patent before being placed in their proper cases among patented models. The loss of these falls on the inventors. In case of final rejection of any application, a new model will not be called for, but in all existing issue cases as well as in those to be allowed in the future the inventor will have an opportunity afforded him of replacing his model. A copy of the circular-letter prepared for this purpose is inclosed herewith.

The loss of rejected models is not serious. These models in all cases where they were required have been returned to the parties furnishing

them. Some which were of use as illustrating mechanics or applied science have been from time to time loaned to schools and seminaries to be returned if called for. The great bulk of them in the Ninth-street loft, about 12,000 in number, were practically valueless, and were kept only because of the possible injustice that might result if they were disposed of without notice to the applicants. Such notice would involve more clerical labor than the force in the office could attend to. The propriety of breaking them up and selling them for old metal has recently been seriously discussed. Such disposition of them is authorized under section 485, Revised Statutes.

The loss, by the destruction by fire and water, of photograph copies of drawings is great. It is estimated that 40,000 sets, of 150 copies each, were destroyed, making over 600,000 copies. These are not to be considered as original records, but were so much stock held for sale and copies only. To replace them, however, will not cost probably less than \$60,000.

The most serious loss in this office, apart from the general destruction of models, was that of about 30 patented drawings which were in the hands of tracers working in the model-room, and in the hurry and confusion of the fire were abandoned and burned. These were all in the class of "wood-working," in which all models were lost also. It is probable many of these drawings can in time be restored from the copies attached to the original letters-patent. It is not impossible, moreover, that some of the metal models in this class may be recovered from the ruins, sufficiently preserved for office purposes.

The patented drawings of the entire issue of September 4, 304 in number, were all destroyed except one. They had been photolithographed, however, so that no serious inconvenience results.

Eleven volumes of English patented drawings, containing 619 drawings, are missing from the library; nine of these were in the model-room, and were undoubtedly consumed. These drawings can be replaced, and duplicates have already been ordered from England. The cost of binding will be the only expense incurred.

In the application division a single issue file is missing. This was waiting the payment of final fee of \$20. It can be reproduced by the joint action of the applicant and the examiner.

In the same division some files of incomplete cases are missing. These have never reached the examiner, and can be replaced by the applicants if they desire; but many of them are considered practically abandoned, and are of no value. Of the 60 volumes of application records, one is missing for part of 1870, but it is probable this will be found.

The examiners' rooms suffered very little loss. Mr. Parkinson reports eight drawings in re-issue applications lost, but in seven of these cases the original drawings are on file. He has missed some files of pending applications, and two volumes of foreign works relating to his class. These can be replaced.

Mr. Fowler has lost a table having in the drawer some manuscript digests, on which a good deal of labor had been expended.

Mr. Durnall reports missing one application file and drawing, five caveat files, and one caveat drawing.

A valuable patented model (an alarm-clock) is missing, probably stolen from Mr. Townsend's room.

Several officers report volumes of office publications missing, but it is probable they are only displaced, and will be eventually found.

No books or original records of any kind are reported damaged by fire or water.

The original files in all patented cases, which are the most valuable records of the office, are kept in rooms on the first floor, near the south-east corner of the building. They were considered perfectly secure from fire, and no water has reached that part of the building. No attempt was, therefore, made to remove them. The sole value of such records depends upon their perfect arrangement and ready accessibility, and the disorder and confusion into which they would necessarily have been thrown by an attempt to remove them would have been a damage scarcely less than their destruction.

In fact, the only losses hitherto discovered of books and papers, save by fire, appear to have arisen from the intrusion of unauthorized persons, who threw them from the windows or otherwise removed them in apparent wantonness.

In the draughtsman's division, where no one was allowed to enter except employes of the office, all the drawings were removed in the portfolios, as well as all files of rejected applications, and were subsequently restored to their places, without loss. The coolness and energy displayed by Mr. Gardner, principal draughtsman, in the management of his force and in the care of the invaluable records in his charge merit special commendation.

Indeed, I cannot speak too highly of the conduct of the officers, clerks, and other employes of this bureau during this most trying emergency. They have made the interest of the office their own, and by night and day, through fire and flood, have been, with few exceptions, faithful and untiring in their efforts to preserve public property and restore order. From their persistent fidelity it has resulted that through a succession of unlooked-for disasters there has been no delay or disturbance of the business of the office except what was occasioned by the absolute want of room in which the work could be done.

I have the honor to remain, Mr. Secretary, very respectfully, your obedient servant,

ELLIS SPEAR,
Commissioner.

Hon. C. SCHURZ,
Secretary of the Interior.

EXHIBIT F.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND-OFFICE,
Washington, D. C., October 9, 1877.

SIR: In compliance with your verbal request of this morning, I have the honor to report the present condition of the records, files, and other property of this office, and the amount of damage thereto resulting from the late fire. The statement is made in detail, and is compiled from the reports of the chiefs of division.

Division A, (Chief Clerk.)—In this division about 400 copies of back numbers of the annual report will require rebinding. This is the only essential damage to documents. The records and files are in good condition.

Division B, (Recorder.)—The records and files in this division are in good condition. Some of the papers in the file-cases have been more or less wet, but are now being dried, and will suffer no material injury.

Division C, (Public Lands.)—The books and papers in this division have suffered no injury. In the hurry of moving, a few books and papers have been misplaced, but are, without doubt, still in the building, and will soon be found.

Division D, (Private Land-Claims.)—No records or papers in this division have suffered any damage. The only loss reported is that of the original manuscript report of the register and receiver at Jackson Court-House, Miss., acting as commissioners in the ascertainment of titles to certain private land-claims in their district. The same matter is contained in the American State Papers, and is therefore accessible in another form.

Division E, (Surveys.)—No damage or loss whatever is reported from this division.

Division F, (Railroads.)—The records and papers are generally well preserved. A few papers are missing, occasioned by hasty removal, but as they are continually being found in other portions of the office, it is thought that all will eventually be recovered.

Division G, (Pre-emption.)—There is no injury to the books and records of this division. Few papers are missing, and those are entirely of cases long since adjudicated.

Division H, (Military Warrants and Agricultural College-Scrip.)—The records and files in this division are uninjured and in good order.

Division K, (Swamp-Lands.)—The records and files are complete and in good order.

Division L, (Draughtsmen.)—None of the records have been damaged.

Division M, (Accounts.)—No records or papers belonging to this division have been lost or destroyed, and are all now in order.

Division N, (Mineral.)—The records and papers in this division are in good condition, and are complete so far as can be ascertained.

The damage by water to the walls, carpets, desks, maps, and wall-furniture cannot, at this time, be definitely stated. The desks are, with a single exception, all preserved, and, with ordinary repairs, will be in as good condition as before.

In nearly all the divisions the work is resumed. In several it was not interrupted except on the day of the fire and a portion of the succeeding one. Within a few days work will be resumed throughout the office.

The clerks and other employés have been constantly at work day and night since the day of the fire in securing from damage and properly assorting and arranging papers. They have been faithful and industrious, and to their efforts is due the prevention of serious damage to the records.

Owing to the necessity of occupying rooms in various portions of the building less contiguous than before, and to the great extra labor enforced by the removal of furniture, books, papers, and documents, considerable increase of the laboring force of the office, including messengers, should be provided, as the number previously employed was barely sufficient at great inconvenience to perform the ordinary service required of them.

Very respectfully, your obedient servant,

J. A. WILLIAMSON,
Commissioner.

Hon. SECRETARY OF THE INTERIOR.

EXHIBIT G.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, October 8, 1877.

SIR: Pursuant to Department instructions of 6th instant, for report in detail of any losses or damage to the records and property of this bureau resulting from the fire on the 24th ultimo and storm of 4th instant, I have the honor to state that volume 4, "Miscellaneous Public Documents," some Ottawa and Chippewa stubs to certificates of allotments and schedules of like allotments, and some of the current mail, upon which action was being taken on the day of the fire, are reported as missing from the land division of this office.

The following divisions, finance, accounts, civilization, and educational, report that they lost no records or papers.

The files division reports that all record-books have been recovered, but many of the file-holders were broken on the day of the fire, causing proportionate confusion of papers, an entire re-arrangement of which has not yet been effected. It is reasonably inferred, however, from the examination already made, that few papers, if any, in this division were lost, destroyed, or damaged beyond repair, and none of importance are known to be missing. A small portion of the office-furniture was damaged somewhat by excited handling on the day of the fire, and a few articles of stationary were lost.

Many records and papers were brought from the General Land-Office during the fire and hastily deposited by many different persons in close proximity to the records and papers of this office in the corridors. They were nearly all moved again on the same day to prevent damage by water; before complete inventory could be made, five of the divisions of this office, with books and papers, were removed to Wright's building.

Since the fire, records and papers have from time to time been returned here from the Patent and Land Offices, thus showing that our records were to some extent confused with theirs, and it is not improbable that whatever is now missing from our files will be found in said offices or our own, when they shall have been thoroughly re-arranged.

No losses or damage to this office is known to have resulted from the storm on the 4th instant.

Very respectfully, your obedient servant,

C. W. HOLCOMB,
Acting Commissioner.

P. S.—Volume 4, "Miscellaneous Public Documents," above named, is a bound collection of printed documents arranged by the office for convenient reference, and has no special official value. The allotments (stubs of which are missing) had been transcribed in the tract-books of this office, and there is also a record of them in the General Land-Office, where patents have been issued for the same lands to the parties named in the allotments.

Respectfully,

C. W. HOLCOMB.

HON. SECRETARY OF THE INTERIOR.