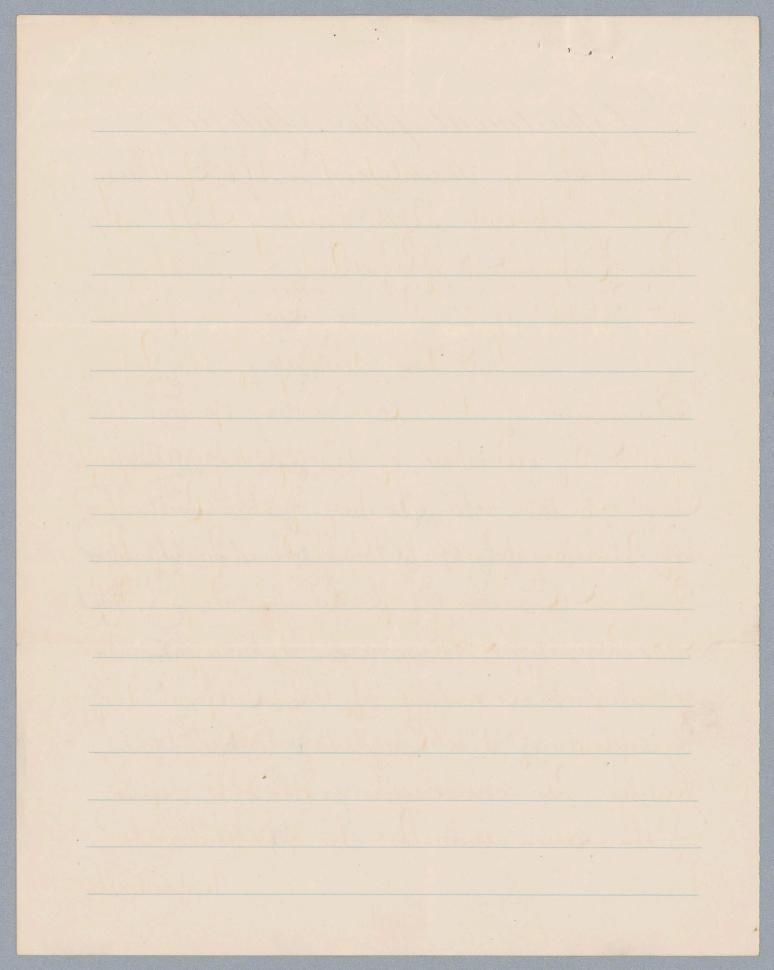
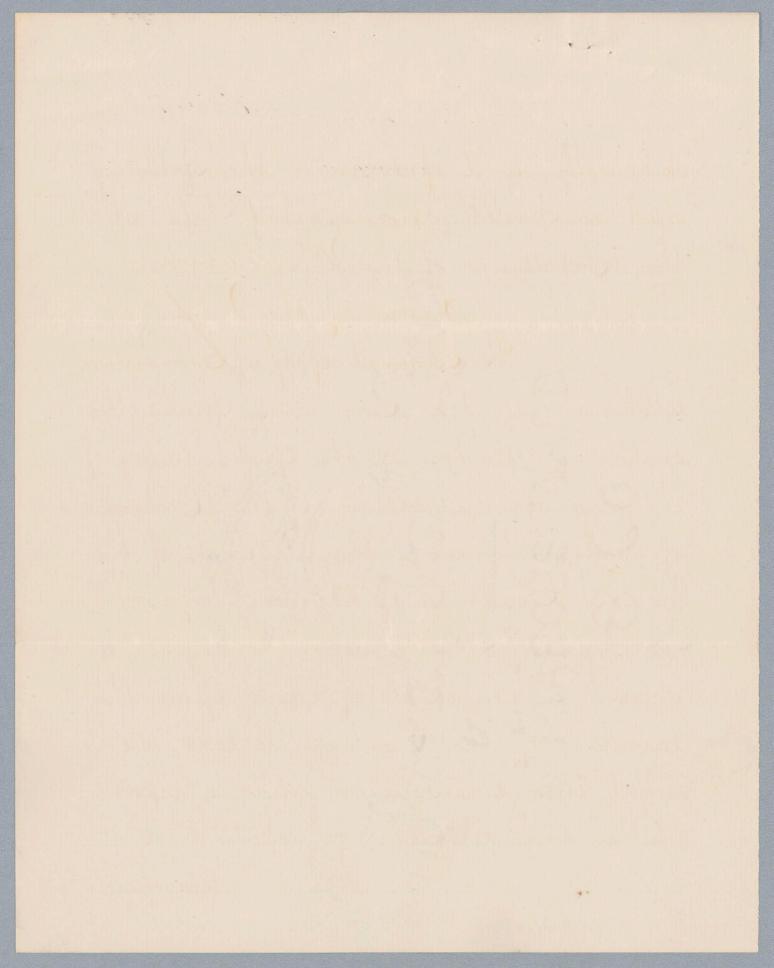


Department of the Interior.) Washington May 6th. 1880. Orof. William B. Rogers. Dresident of the Prational Cicadamy of Sciences. Brotion. Mass. Dir: By joint resolution of brongress, approved, August 3. 1846. The Decretary of the Interior, the Decretary of the Amithemian Institution and the Librarian of brongress, were constituted a commission remponered to take measures to restore the miting of the Declaration of Independence as the signatures rappended thereto. In compliance with the direction of the Commission I have the honor to Submit



[5/6/ 1880] submit for your consideration the following resolution passed rat a meeting held at the Department of the Interior on the 5th instant. That the Decretary of the Interior, "Chairman of the Commission, Spresent the "question of restoration of the graded willing of "The original manuscript of the Declaration "of Independence, to the President of the " Prational Cicademy 10 Decimces, Professor William "38. Clogues, of Boston, with the request to "appoint a committee of respects, from the "members of the Cicademy, to take the "subject into consideration, and to report "mucher such restroration be expedient or (practicable

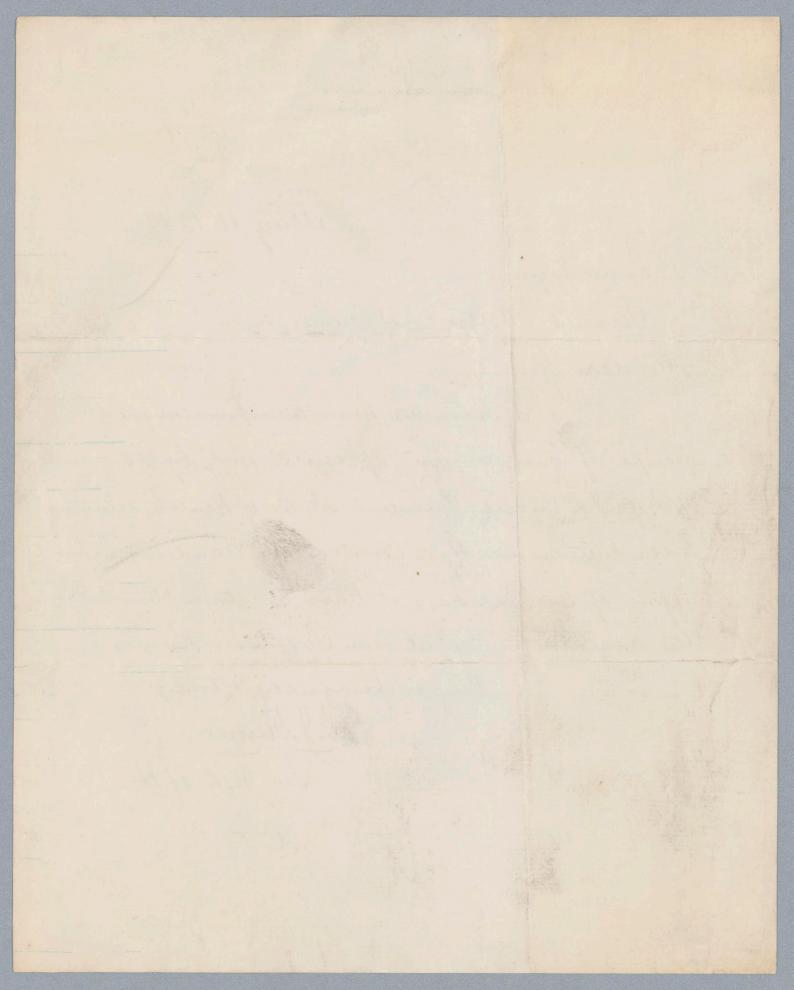


[5161 1880] "object can best be accomplished." C. Jam Secretary of the Interior and Chairman of the Grommitsion.

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NATIONAL BOARD OF HEALTH WASHINGTON.

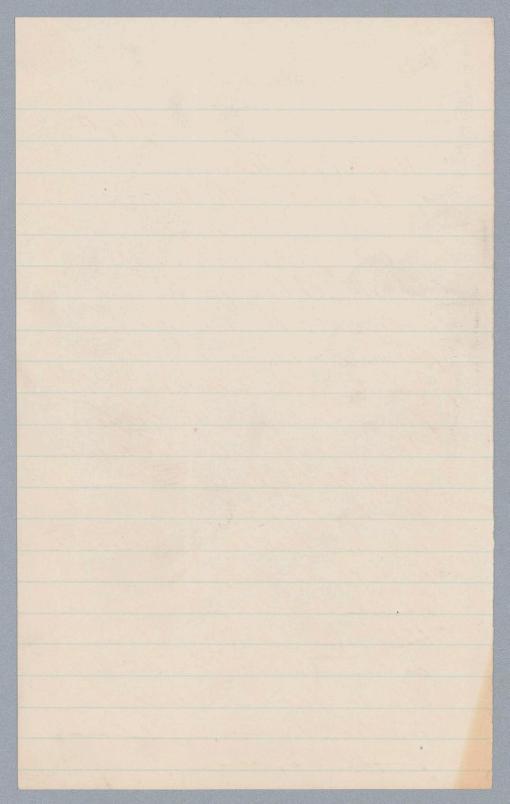
May 11. 1880 W. B. Rogers Esque President N. Acady of Sciences to to My dear fir, I have the honor to acknowledge the receipt of you comme of the 3° int by the hands of Org: S.L. Cabell. Precident N. B. of Health, relating to the continuance of a Commi of the academy upon the affairs of this Board. I have to return thanks for the consideration and an Orfessor Rogers Very nerpectfully & truly I.J. Fumer Sec. n. B. of H 2005.



Mass. Institute of Technology,

Boston, May 12 1880 To Honde Carl Schurtz decretary of the Interior. Washington . DC. Dear Sir. I have the honor to Contraction What Lee " of your question of the Wester ation of the faded Writings of the Original Thanscrift of the Declaration of midependence " and lequesting mi to appoint a Conning confunds fun the menter of the headen se to latte the delight the Cand de the las hegh day that have jorg toda returne to Bester I Aman Lequest, but that I shale love no terricia Selection a Connota

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1 Minnapolis Minn. May 15, 1880. Pusident Rogers; Deter Dei; John Can Jah 12 ai the way of securing for men In any the positions ramed hsunder anobligation , Very huf respectfully Am to Foliore Ww Keltener Robbus Arristent in the department of Blermisty - Quantitation Analysis

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GENERAL ORDERS

HEADQUARTERS OF THE ARMY, ADJUTANT GENERAL'S OFFICE, Washington, May 17, 1880.

The following Acts of Congress are published for the information and government of all concerned :

I__AN ACT making appropriations for the support of the Army for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the support of the Army for the year ending June thirtieth, eighteen hundred and eighty-one, as follows:

For expenses of the commanding general's office, two thousand five hundred dollars.

For expenses of recruiting and transportation of recruits from rendezvous to depot, seventy-five thousand dollars. And no money appropriated by this act shall be paid for recruiting the Army beyond the number of twenty-five thousand enlisted men, including Indian scouts and hospital-stewards; and thereafter there shall be no more than twenty-five thousand enlisted men in the Army at any one time, unless otherwise authorized by law. Nothing, however, in this act shall be construed to prevent enlistments for the Signal Service, which shall hereafter be maintained, as now organized and as provided by law, with a force of enlisted men not exceeding four hundred and fifty.

For contingent expenses of the Adjutant-General's Department at the headquarters of military divisions and departments, three thousand dollars.

For expenses of the Signal Service of the Army, purchase, equipment, and repair of electric field-telegraphs and signal equipments and stores, ten thousand five hundred dollars.

PAY DEPARTMENT.

FOR PAY OF THE ARMY: One general, one lieutenant-general, three major-generals, fifteen brigadier-generals, seventy colonels, eighty-five lieutenaut-colonels, two hundred and forty-three majors, three hundred and twelve captains, mounted, three hundred and six captains, not mounted, thirty-four chaplains, twenty-one storekeepers, forty adjutants, forty regimental quartermasters, two hundred and two first lieutenants,

mounted, three hundred and sixty first lieutenants, not mounted, one hundred and forty-six second lieutenants, mounted, three hundred and five second lieutenants, not mounted; including the additional pay to thirty-five aides-de-camp, to the adjutant and quartermaster of the Engineer Battalion, to one hundred and eighty acting assistant commissaries of subsistence, in addition to pay in line, to officers of foot regiments while on duty which requires them to be mounted, to the officer in charge of public buildings and grounds in Washington, and to the examiner of State claims in the office of the Secretary of War; four hundred retired officers; enlisted men of all grades not exceeding twenty-five thousand men; four hundred and fifty enlisted men of the Signal Corps; the allowances for travel, retained pay, and clothing not drawn, payable to enlisted men on discharge; and one retired ordnance sergeant, eleven million five hundred and forty-eight thousand six hundred and one dollars and fiftyfive cents.

For mileage of officers of the Army for travel on duty under orders, two hundred thousand dollars.

For miscellaneous expenses, to wit: Hire of one hundred and twentyfive contract surgeons and two hundred hospital-matrons; extra-duty pay to enlisted men for service in hospitals; pay of fifty-four paymasters' clerks and fourteen veterinary surgeons; hire of paymasters' messengers, not to exceed fifteen thousand dollars; cost of telegrams on official business received and sent by officers of the Army; compensation of citizen clerks and witnesses attending upon military courts and commissions; travel expenses of paymasters' clerks; commutation of quarters for officers on duty without troops at places where there are no public quarters; and for the payment of any such officers as may be in service, either upon the active or retired list, during the year ending June thirtieth, eighteen hundred and eighty-one, in excess of the numbers for each class provided for in this act, five hundred and fifty-one thousand one hundred and ninety-eight dollars and forty-five cents.

SUBSISTENCE DEPARTMENT.—For subsistence of twenty-five thousand enlisted men, one hundred and twenty additional half-rations for sergeants and corporals of ordnance, enlisted men of the Signal Service, women to companies (laundresses), one thousand eight hundred and seventy-five civilian employees, one hundred and twenty-five contract-surgeons, two hundred hospital-matrons, one hundred and ten military convicts, and five hundred prisoners of war (Indians), in all ten million seven hundred and fifty-five thousand eight hundred and twenty rations, at twenty cents each; for difference between cost of rations and commutation thereof for detailed men, and for enlisted men and recruits at recruiting stations, and for cost of hot coffee and cooked rations for troops traveling on cars; for subsistence stores for Indians visiting military posts, and Indians employed without pay as scouts, and guides, two million two hundred and fifty thousand dollars; of which amount three hundred thousand dollars shall be available from and after the passage of this act for the purchase of stores necessary to be transported to distant posts in advance of the thirtieth of June, eighteen hundred and eighty: *Provided*, That to the cost of all stores and other articles sold to officers and men, except tobacco, as provided for in section one thousand one hundred and forty-nine of the Revised Statutes, ten per centum shall be added to cover wastage, transportation, and other incidental charges, save that subsistence supplies may be sold to companies, detachments, and hospitals at cost prices, not including cost of transportation, upon the certificate of an officer commanding a company or detachment, or in charge of a hospital, that the supplies are necessary for the exclusive use of such company, detachment, or hospital.

QUARTERMASTER'S DEPARTMENT.—For the regular supplies of the Quartermaster's Department, consisting of stoves for heating and cooking; of fuel for officers, enlisted men, guards, hospitals, storehouses; and offices; of forage in kind for horses, mules, and oxen of the Quartermaster's Department at the several posts and stations, and with the armies in the field; for the horses of the several regiments of cavalry, the batteries of artillery, mounted men of the Signal Service, and such companies of infantry and scouts as may be mounted, and for the authorized number of officers' horses, including bedding for the animals; of straw for soldiers' bedding; and of stationery, including blank books for the Quartermaster's Department, certificates for discharged soldiers, blank forms for the Pay and Quartermaster's Departments, and for printing of division and department orders and reports, three million six hundred thousand dollars.

For incidental expenses, to wit: For postage and telegrams or dispatches; extra pay to soldiers employed under the direction of the Quartermaster's Department in the erection of barracks, quarters, storehouses, and hospitals, in the construction of roads, and other constant labor, for periods of not less than ten days, including those employed as clerks at division and department headquarters, and Signal-Service sergeants; expenses of expresses to and from the frontier posts and armies in the field; of escorts to paymasters and other disbursing officers, and to trains where military escorts cannot be furnished; expenses of the interment of officers killed in action, or who die when on duty in the field, or at posts on the frontiers, or when traveling on orders, and of non-commissioned officers and soldiers; authorized office furniture; hire of laborers in the Quartermaster's Department, including the hire of interpreters, spies, and guides

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for the Army; compensation of clerks to officers of the Quartermaster's Department; compensation of forage and wagon masters authorized by the act of July fifth, eighteen hundred and thirty-eight; for the apprehension, securing, and delivering of deserters, and the expenses incident to their pursuit; and for the following expenditures, required for the several regiments of cavalry, the batteries of light artillery, and such companies of infantry and scouts as may be mounted, and for the trains, to wit: hire of veterinary surgeons, medicine for horses and mules, picketropes, and for shoeing the horses and mules; also, generally, the proper and authorized expenses for the movement and operations of the Army not expressly assigned to any other department, one million dollars.

For purchase of horses for the cavalry and artillery, and for the Indian scouts, and for such infantry as may be mounted, two hundred thousand dollars.

For transportation of the Army, including baggage of the troops, when moving either by land or water; of clothing and camp and garrison equipage from the depots of Philadelphia and Jeffersonville to the several posts and Army depots, and from those depots to the troops in the field: of horse equipments and of subsistence stores from the places of purchase and from the places of delivery, under contract, to such places as the circumstances of the service may require them to be sent; of ordnance, ordnance stores, and small-arms from the founderies and armories to the arsenals, fortifications, frontier posts, and Army depots; freights, wharfage, tolls, and ferriages; the purchase and hire of horses, mules, oxen, and harness, and the purchase and repair of wagons, carts, and drays, and of ships and other sea-going vessels and boats required for the transportation of supplies, and for garrison purposes; for drayage and cartage at the several posts; hire of teamsters; transportation of funds for the pay and other disbursing departments; the expenses of sailing public transports on the various rivers, the Gulf of Mexico, and the Atlantic and Pacific; for procuring water at such posts as, from their situation, require it to be brought from a distance; and for clearing roads and for removing obstructions from roads, harbors, and rivers, to the extent which may be required for the actual operations of the troops in the field, four million dollars.

For hire of quarters for troops, of storehouses for the safe-keeping of military stores, of offices, and of grounds for camp and summer cantonments, and for temporary frontier stations; for the construction of temporary huts and stables; and for repairing public buildings at established posts, eight hundred and eighty thousand dollars. For construction and repair of hospitals, as reported by the Surgeon-General of the Army, seventy-five thousand dollars.

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For purchase and manufacture of clothing and camp and garrison equipage, and for preserving and repacking the stock of clothing and camp and garrison equipage and materials on hand at the Philadelphia, Jeffersonville, and other depots of the Quartermaster's Department, one million dollars.

For all contingent expenses of the Army not provided for by other estimates, and embracing all branches of the military service, to be expended under the immediate orders of the Secretary of the War, forty thousand dollars.

MEDICAL DEPARTMENT.—For purchase of medical and hospital supplies, medical care and treatment of officers and soldiers on detached duty, expenses of purveying-depots, advertising, and other miscellaneous expenses of the Medical Department, two hundred thousand dollars.

For the Army Medical Museum, and for medical and other works for the library of the Surgeon-General's Office, ten thousand dollars.

ENGINEER DEPARTMENT.—For engineer depot at Willets Point, New York, namely: For purchase of engineering materials to continue the present course of instruction of the engineer battalion in field engineering, one thousand dollars.

For incidental expenses of the depot, remodeling ponton-trains, repairing instruments, purchasing fuel, forage, stationery, chemicals, extra-duty pay to soldiers engaged in special skilled labor, such as wheelwright work, printing, photographing and lithographing engineer documents, and ordinary repairs, four thousand dollars.

ORDNANCE DEPARTMENT.—For the ordnance service, required to defray the current expenses at the arsenals; of receiving stores and issuing arms and other ordnance supplies; of police and office duties; of fuel and lights; of stationery and office furniture; of tools and instruments for use; of public animals, forage, and vehicles; incidental expenses of the ordnance service, including compensation of workmen in the armory and museum building connected with the Ordnance Office and those attending practical trials and tests of ordnance, small-arms, and other ordnance supplies, one hundred and ten thousand dollars.

For manufacture of metallic ammunition for small-arms, eighty thousand dollars.

For overhauling, cleaning, and preserving new ordnance stores on hand at the arsenals, twenty thousand dollars.

For mounting and dismounting guns and removing the armament from forts being modified or repaired, including heavy carriages returned to arsenals for alteration and repairs, and other necessary expenses of the same character, and for repairing ordnance and ordnance stores in the hands of troops and for issue at the arsenals and depots, and for extraduty pay for enlisted men detailed for ordnance service, thirty thousand dollars.

For purchase and manufacture of ordnance stores, to fill requisitions of troops, one hundred and fifteen thousand dollars.

For infantry, cavalry, and artillery equipments, consisting of clothingbags, haversacks, canteens, and great-coat straps, and repairing horse equipments for cavalry troops, sixty-five thousand dollars.

For powder depot: For grading grounds, erecting magazines, and other necessary buildings, and all expenses incident thereto, fifty thousand dollars: *Provided*, That the Secretary of War may, in his discretion, expend a sum not exceeding eighteen thousand five hundred dollars of this amount in the purchase of additional land adjoining the present site

For manufacture of arms at national armories, three hundred thousand dollars.

That upon the application of any college, university, or institution of learning incorporated under the laws of any State within the United States, having capacity at the same time to educate not less than one hundred and fifty male students, the President may detail an officer of the Army on the retired list to act as president, superintendent, or professor thereof; and such officer may receive from the institution to which he may be detailed the difference between his retired and full pay, and shall not receive any additional pay or allowance from the United States.

UNITED STATES TESTING-MACHINE.—For caring for, preserving, using, and operating the United States testing-machine at the Watertown arsenal, five thousand dollars.

SEC. 2. That no money appropriated in this act is appropriated or shall be paid for the subsistence, equipment, transportation, or compensation of any portion of the Army of the United States to be used as a police force to keep the peace at the polls at any election held within any State: *Provided*, That nothing in this provision shall be construed to prevent the use of troops to protect against domestic violence in each of the States on application of the legislature thereof or of the executive when the legislature cannot be convened [.]

Approved May 4, 1880.

II._AN ACT making appropriations for fortifications and other works of defense, and for the armament thereof, for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one hundred thousand dollars be, and the same is hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the protection, preservation, and repair of fortifications and other works of defense, for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, the same to be expended under the direction of the Secretary of War; also, the following for the armament of fortifications, namely:

For the armament of sea-coast fortifications, including heavy guns and howitzers for flank defense, carriages, projectiles, fuses, powder, and implements, their trial and proof, and all necessary expenses incident thereto, and for machine guns, including the conversion of smooth-bore cannon into rifles, and the manufacture of four improved breech-loading twelve inch rifled guns four hundred thousand dollars.

For torpedoes for harbor defenses, and the preservation of the same, and for torpedo experiments in their application to harbor and land defense, and for instruction of engineer battalion in their preparation and application, fifty thousand dollars: *Provided*, That the money herein appropriated for torpedoes shall only be used in the establishment and maintenance of torpedoes to be operated from shore stations for the destruction of an enemy's vessel approaching the shore or entering the channels and fairways of harbors.

Approved May 4, 1880.

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III__AN ACT to authorize the sale of Fort Logan, Montana Territory, and to establish a new post on the frontier.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be and he is hereby authorized and empowered to establish a new military post at or near the Mussel Shell River in the Territory of Montana, as he may deem best for the protection of the frontier from Indian incursions: *Provided*, The total cost of the same shall not exceed the sum of fifty thousand dollars.

SEC. 2. The Secretary of War is hereby authorized and directed, after due notice, to sell at public auction or otherwise dispose of in parcels or otherwise, as he may deem most advantageous to the government, the site, reservation and buildings of Fort Logan, Montana Territory, and re-

invest the proceeds of such sale in the erection of the post authorized by the first section of this act: *Provided*, That such portion of said buildings, or of the materials thereof, as can be profitably removed to said new post, may be reserved from sale and so removed.

Approved May 8, 1880.

BY COMMAND OF GENERAL SHERMAN:

E. D. TOWNSEND, Adjutant General.

OFFICIAL:

Assistant Adjutant General.

1880.

Name.	Rank and regiment.	College or university.
George T. Olmsted, jr Thomas J. Spencer Rezin G. Howell Charles Morris Frank W. Hess Junius W. MacMurray James B. Burbank Henry Romeyn George A. Thurston Luigi Lomia M. C. Wilkinson Bphraim T. C. Richmond Henry C. Danes Medorem Crawford, jr. John L. Clem William A. Dinwiddie Charles R. Barnett Albert S. Cummins Joseph Garrard Mitchell F. Jamar John E. Myers Clar: nce Deems George R. Cecil John P. Jefferson Edwin B. Bolton Frasmus M. Weaver, jr Brasmus M. Weaver, jr	capt. U. S. A capt. 10 cav 11t. 2 art 11t. 5 art 11t. 5 art 11t. 3 art 11t. 5 inf 11t. 5 inf 11t. 5 inf 11t. 5 art 11t. 5 art 11t. 5 art 11t. 5 art 11t. 3 art 11t. 3 art 11t. 3 art 11t. 3 art 11t. 3 art 11t. 3 art 11t. 2 art 11t. 2 art 11t. 4 art 11t. 2 inf 11t. 4 art 11t. 2 art 11t. 2 art 11t. 2 art 11t. 2 art 11t. 4 art 11t. 4 art 11t. 4 art 11t. 4 art 11t. 2 art 11t 11t 11t 11t 11t 11t 11t 11t 11t 11	Agr'l and Mechanical College of Texas, Bryan, Texas. Southern Illinois Normal University, Carbondale, Ill. Kentucky University, Lexington, Ky. Massachusetts Agricultural College, Amherst, Mass. Allegheny College, Meadville, Pa. Union College, Schen etady, N. Y. Cornell University, Inhaa, N.Y. Hampton Normal and Agr'l Institute, Hampton, Va. Jova State University, Iova City, Iova. Ohio State University, Iova City, Iova. Mestern University of Pennsylvania, Pittsburg, Pa. University of Nebraska. Lincoln, Neb. Bishop Seabury Mission, Faribault, Minn. Bouedoin College, Brunswick, Me. Galesrille University, Galesnille, Misn. Bouedoin College, Brunswick, Me. Galesrille University, Galesnille, Misn. University of Vermont, Burlington, VI. Pennsylvania Military Academy, Chester, Pa. University of Vermont, Burlington, VI. North Georgia Agricultural College, Dahlonega, Ga. Louisian State University, Baton Rouge, La. Cornell College, Mount Vernon, Iova. Maryland Agr'l College, Picnee George's Co., Md. Michigan Military Academy, Orchard Lake, Mich. Brooks Military Leademy, Orchard Lake, Mich. Brooks Military Leademy, Orchard Lake, Mich. Brooks Military Lastit, Gales, Christian, Miss. Western Reserve College, Hudson, Ohio.
Francis P. Blair	2 lt. 3 art	

Established colleges or universities, with officers of the Army serving thereat, under section 1225, Revised Statutes.

SEC. 1225. "The President may, upon the application of any established college or university within the United States, having capacity to educate, at the same time, not less than one hun-dred and fifty male students, detail an officer of the Army to act as president, superintendent, or professor thereof; but the number of officers so detailed shall not exceed * * * [thirty] at or professor thereof; but the number of officers so detailed shall not exceed * * * [thirty] at any time, and they shall be apportioned throughout the United States, as nearly as may be prac-ticable, according to population. Officers so detailed shall be governed by general rules pre-scribed, from time to time, by the President. The Secretary of War is authorized to issue, at his discretion and under proper regulations to be prescribed by him, out of any small-arms or pieces of field-artillery belonging to the government, and which can be spared for that purpose, such number of the same as may appear to be required for military instruction and practice by the students of any college or university under the provisions of this section : and the Secretary shall require a bond in each case, in double the value of the preperty, for the care and safe keeping thereof, and for the return of the same when required." SEC. 1260. "Any retired officer may, on his own application, be detailed to serve as professor in any college." [But while so serving, such officer shall be allowed no additional compensa tion.]

tion.] I. The following regulations, in regard to detail of officers of the Army at established col-leges and universities within the United States, are prescribed by the President, under the

above laws: 1. Details "shall be apportioned throughout the United States as nearly as may be practica-1. Details "shall be apportioned throughout the united states as nearly as may be practica-tication of the states of t ble according to population"; such States as do not contain sufficient population to entitle them to one officer will be grouped with one or more contiguous States or Territories, so that the combined population of the group will allow the detail of one or more officers, to the extent of thirty officers in all.

2. As a rule, captains of companies, regimental staff officers, or officers who have served less than three years with their regiments or corps, or who have recently completed a tour of de-tached duty, will not be eligible. No details will be made that will leave a battery, troop, or company without two officers for duty with it. The period of detail will not be longer than three years.

3. Retired officers, if acceptable to any institution, may, on their own request, be detailed on

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this duty among the thirty authorized. Besides this number, any retired officer may arrange this university and the contrast of the second states of the second stat

tution, who should make their selection from the officers available for this duty.

5. Applications for officers should be addressed to the Secretary of War, and should duly certify the number of male students the college or university has the capacity to educate, and should also be accompanied by the last printed catalogue.

6. Officers of the Army desiring a detail at colleges or universities may make application to the Adjutant General, through the usual military channels, for such details: their applications and the recommendations forwarded therewith will, if the officers are available, be furnished to such institutions as may desire to make a selection.

II. The following are the regulations prescribed by the Secretary of War for the issue of arms, &c., required for military instruction and practice at colleges and universities, under

section 1225, Revised Statutes — 1. The number of pieces of field artillery, with necessary implements, and of small-arms and accountrements, which may be issued for the purposes of military instruction to each selected college and university having an officer of the Army stationed thereat, is limited to the following, viz:

2 3-inch rifled guns, wrought - iron, model 1861, at \$450		2 tompions, 3-inch, at 30 cents 2 vent-covers, at 40 cents	\$0	60 80
2 carriages and limbers, 3-inch gun, at		1 pendulum hausse, 3-inch	2	50
\$325	650 00	1 pendulum hausse seat		60
2 gunner's haversacks, at \$3.35	6 70	1 pendulum hausse pouch		75
2 handspikes, trail, at \$1	2 00	2 paulins, 12 by 15 feet, at \$11.75	23	50
4 lanyards, at 10 cents	40-	150 Springfield "cadet" rifles, cal45,		
2 priming-wires, at 10 cents	20	with appendages, &c., at \$18	2,700	00
4 sponges and rammers, 3-inch, at \$1.	4 00	150 bayonet scabbards, steel, cadet,		
4 sponge-covers, 3-inch, at 30 cents	1 20	at 91 cents	136	50
2 tube-pouches, at \$1.50	3 00	150 waist belts and plates, at 50 cents	75	00
4 thumbstalls, at 20 cents	80	150 cartridge-boxes, cal45, at \$1.25.	187	50

2. Issue of the above stores will be made by the Chief of Ordnance to any selected institution upon its filing a bond in the penal sum of double the value of the property, conditioned that it will take good care of and safely keep and account for the same, and will, when required by the Secretary of War, duly return the same, within thirty days, in good order, to the Chief of Ord-nance United States Army, or such officer or person as the Secretary of War may designate to receive it.

3. To conform to the requirements of the law, the terms "college" and "university" herein used are held to relate to "State institutions, incorporated or public," and not to "mere schools, private or municipal.

The following is the blank form of bond to be executed previous to the issue of ordnance and ordnance stores, viz: *

*

5. For practice-firing, the following allowances of ammunition will be made annually to each of the various institutions, viz:

*

*

1,000 carbine metallic ball-cartridges, cal. .45. 1,000 metallic blank cartridges, cal. .45. 100 round blank cartridges for 3-inch gun.

300 friction primers.

This ammunition will be issued upon requisitions to be forwarded to the Chief of Ordnance by the presidents or superintendents of the institutions; and as annual allowances date in all cases from July 1 of each year, requisitions should be forwarded before or as soon after that date as practicable for the prospective year's supply. Undrawn allowances of one year cannot be drawn in the succeeding year.

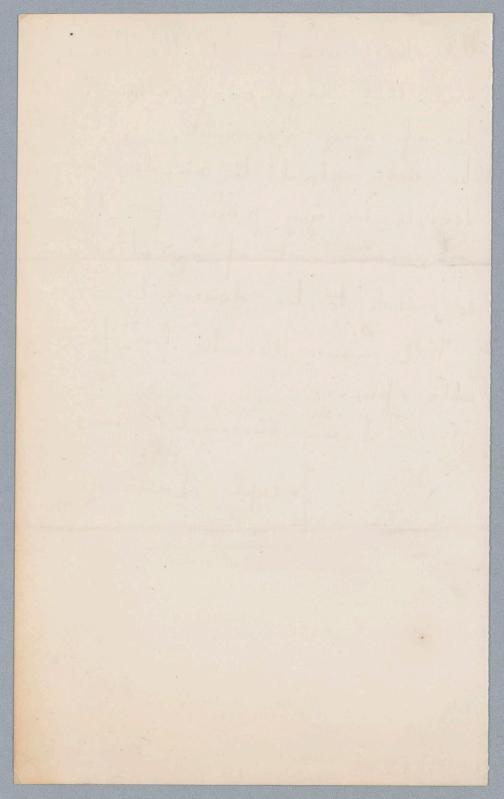
be drawn in the succeeding year. 6. Regular property returns will be rendered quarterly to the Chief of Ordnance by each president or superintendent of an institution supplied with arms, &c., accounting for all ord-nance and ordnance stores issued to the institution under his charge. These returns will be made on the blank forms to be supplied by the Chief of Ordnance. 7. Whenever any institution shall fail to return the public property in its charge within thirty days after demand made by the Secretary of War, the delinquency will be promptly re-ferred to the Attorney General, that the bond of the institution may forthwith be put in suit. 8. All expresses of stores one to be home by the institution way for the ord

8. All expense of repairs of stores are to be borne by the institution using the same, the Ordnance Department supplying spare parts for repairs at cost price.

[G. O. No. 100, Adjutant General's Office, November 21, 1879.]

Cambridge, May 19/80 Dear Inf: Rogers: After receiving your kind communication of Mary 14, I need again Brof: Inndall's letter to the late Brof. Henry. I have no dulet that the trust, it wisely administered, can do much for the encouragement. of original scientific research in this country. You will certanly agree with nie in think ing that having and matual cupidence in the Board of Inestees aire of the first ineperhance. If you think that my appoint. ment would be agreeable to

the other members of the Board, and that my cooperation would he of any account, I shall he very glad to render any dervice in my power for the advancement of an object, so much to be desired. With many thanks for favor. able opinion I am sincenely yurs; Joseph Loreing.



OFFICE OF THE U.S. COAST AND GEODETIC SURVEY WASHINGTON, D.C.

May 17 = 1880-

My dear Sir;

I shall be very glad to serve on che committee for restoring the Independ ence Manuscript, and have so telegraphed you, informing you at the same time of the fact that your report for the headeny has been order ed to be printed by the House, and is before The Smale for actions. These statements hardly require further Explanation

Takley take able pare shing the relling after that my a pristoral -used the proto todeanny state , in connection the shear size , with the had the build prove the server and the straight have the of protocold whe I replaced that principal say it has an appending and it Teals for cereisers of shall there of the fort that Defense and the game a grad all the hard hard fil mare busk-Just filen from the Prog. Wer B. Regers, 10 1 1 and that have of the

I will very add the further assurance strat I are looking after the matter at every steps, in connection with the Act to Authorize the heading to hold Just finds. I repet very much that I will not be able to be with you next week. The way-weariness of the Deficiency and the general lefferdiation lills keeps me back. Yours faithfuely. J.E. Hilgard Pry- Me B. Rogero; President Mat- head. of Science, 117 Malbongh St., Boston, Mass.

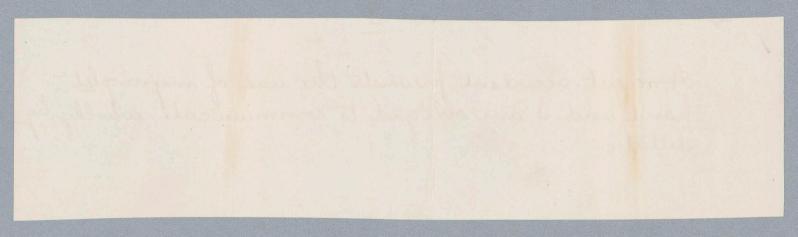
131 Devonshire St. Boston, May 18. 1880. Prof. Wm. B. Rogers I.L. D. Dear Sir, In response to your request, I herewith send to you this statement of the principal professional work upon which I have been engaged since 1873. In the summer of that year, I was employed upon the test of the Sym Water Works pumping engine by a board of consulting Engineers consisting of measure. Wm. 6. Worthers of New York, Chas. Bermany of Louisville, the late John . Rickwood of Brooklyn, Jos. B Davis of Boston, and John b. Heradley of Lawrence. Later in the season I was engaged upon a similar test of the pumping engine at Lowell, under a similar commission consisting of mesors. Jas. B. Francis of Lowell, John b. Keradley and trm. E. Worthen. In addition to the work during this trial, I was employed to compute the results from the observations taken during the tests. Subsequently I was employed in similar work at the second test of the Lynn pumping engine and at the test of the Lawrence pumping engines. my duties when these tests consisted in preparation of

the apparatus employed making measurements of fuel, water, temperatures and the other data connected with the operation of the machine, including the use of the indicator and of the hook gauge in the wier measurements of water and in the tabulation of results. most of my other work has been more private in its nature, but has consisted of similar tasks for private individuals and corporations and also surveying land, laying out and building roads re. work but have made a speciality as far as possible of questions pertaining to hydraulics and the use of steam and water for motive purposes. leo. of Rockport mass, to design special machinery, and subsequently became superintendent of that corporation. Later I resigned that position and entered the services of the mill mutual mourance less as an inspector of the hydraulic service of mills, their construction and such other engineering duties as may be assigned to me. I have no connection with underwriting except indirectly as stated above. Of my course at the Institute I can merely say that nature has not vouchsafed to me the power of

I have not had any connection with railroad or bridge In April 1877, I was employed by the Sawrence Spool

facile acquisition of knowledge; and tasks easily mastered by others, were learned by myself only after persistent and continuous application. Baving prepared for leollege, my plans were changed at a late day, and I resolved to enter the Institute. After the first year, I met with no conditions (if memory serves aright) excepting in descriptive astronomy at the semi-annual of the third year, anditwas made up before the annual examina tion of that year. I am a member of the American Society of mechanical Engineers, and of the New England botton manufacturers Association. Rospectfully & ubmitted, Og. L. Woodbury.

[5/18/1880] A recent accident prevents the use of my right hand and I am obliged to communicate wholly by dietation.



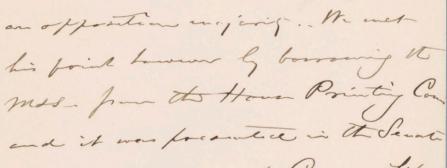
Pop M. B. Rogen Por A.A.S.

OFFICE OF THE U.S. COAST AND CEODETIC SURVEY WASHINCTON, D.C.

Mashincton, D.C. May 18/80 4 Bu 4 Bu 4 Bu 15 dea President, 20m 1

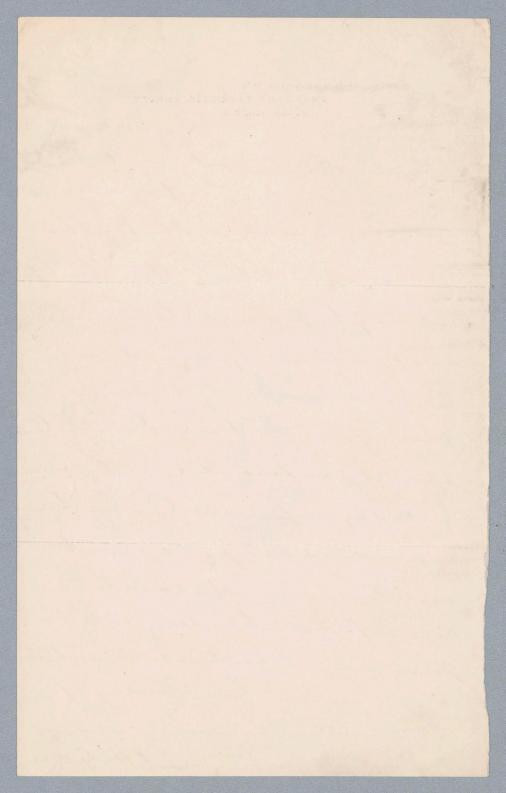
Justiday is need. The Vice Presh

was non functilians than her life - (it may be pround), because of



restoring, afrend to Com. m Libray and ordered how priced A

volution & print soveatra copies for the Academy will be presented at carlinas. Em that it is in order - I am looking after this within a work & heligopha



WM. B. WHITING, Vice-President and Secretary.

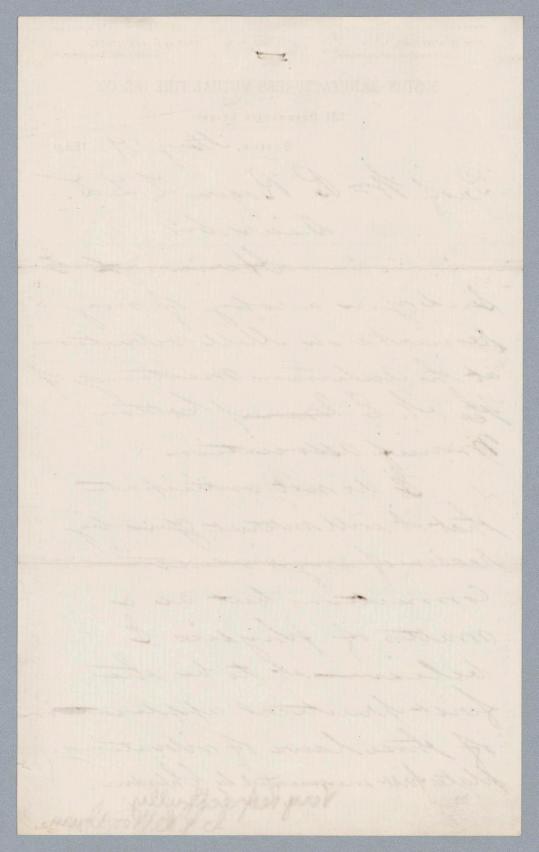


EDWARD ATKINSON, President and Treasurer.

BOSTON MANUFACTURERS MUTUAL FIRE INS. CO.

131 Devonshire Street.

Boston, Mary 19 1880 Prof. Mm & Rogen Z. Z. S. Dear Sri Horing I Send your a copy of my remarks on Mill vebration at the autom meeting of the M. E. Homen Cotton monuf. alsociation & do not anticipate that it will intorat your by Reason of my mainstrice Committeen, but as a matter of physics & beleand to be the forst practical application of show laws of vibrating plates first- encounceated by Chladmi. Very hespectfully. b.g. D. Woodbury.



School of Mines, Columbia College,

CORNER 50TH STREET & 4TH AVENUE,

New York, May 19, 1880

My dear Ju-Va reply to your favor

I would say that I shall

he most happy to serve on

the Committee of the

Academy to which is as-

signed the duty of considering the question of restoring

the writing of the Declaration of Independence + The Signatimes appended there to.

The Subject was referred to

me during the Centennial & I gave Some study to it at that time, but did not deaile whow any me thad which I thought & safe to apply to this valuable document. I shall be very glad to take up the Subject again in Such good company al you mention Very July Jos O. Z. Chaudler per seo. 7. Insher Lo Da. W.B. Rogers.

Columbia College,

New York.

President's Room, May 21, 1880.

My Dear Prof.

Fam in receipt of your letter of the notify = my me of your appointment of Infi dooring as third Instraythe Squdall frid . Mails Prof. Dovering is entirely queoptatte to mpet demot but regret that you did not appoint Prof. Morton - my only reason in favor of his appointment, however bring the very one which induced you not to make it, viz, that he is in the minodiate vicencity of the other two masters , In the

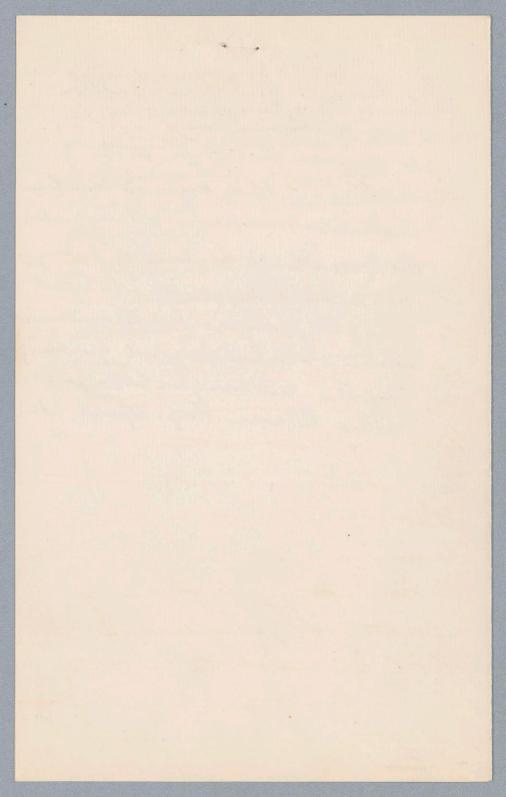
discussion of quistions alich are now lokely very toon to arise, as tothe application to be made of the tis come of the find, the personal intercommunication between the Trus Ters will be midispursable, and frequent consultations may be recessary. This will impose apose Tref. Lovering, or upon as who are here, the necessity to making the fourney from time to time between New york and Porton which will be Comestrat inconvenient. The selection power, is as tatirity anoptable to me, and I moscome & Inf. yournand, as any one conto be at & distance from New york. Iaus, Ving Seneraty Agones O; A. P. Harrand

Jorg, W. A. Rogers ..

hupalant (Bolescy 1880) 2 Comm; on School May 23, 2Pm 1. Theses, and order of Graduating 2. Care of M Wood bury. Spent If your as a reputtion That at hat Dep'n Cro. Englishing the metuda; The Internedicte Francia 4 to Closing En , in Con Engenceing was not additter to har de gree -Kan somi her Constantly occupies to onfortant enjencing londer of Which has going amon ald alitant a ' his letter - Has Day It hert lorator hear lagang the Enformants with an affanatus of his bar trantie on Linbrication , Orlin de - L how donting an accor of them & other houses hi lien ga Hessin - While andring the Cost get Inst. to granthin the Degree of SB, hi fine, Englicent ght Clop of 1873 -

Whenthe tim ton -That a down's get particles reventing other Querige little that. show bording, and the fine torating he requited a commenter Thereof - find dates finting hang what de Cases my have become the 1E.

3. Montion Ger I. A. Walter a one of Whom I have thought on a desmake Queaftor - as Ben'y 12- First - Have Enquired Desithings Chancele & guestificate, ~ Mangaales At yale where he have Part for my news - Poop Manse, spectres - 16 highert lems of his platty on a lecture & administ opicia - a has poplisters on the guesting; Poop. B - reading his letter for 200 - Clarence Ring; Opinin - to.



WAR DEPARTMENT, Adjutant General's Office, Washington, May 25, 1880.

[Circular.]

In addition to the instructions contained in General Orders No. 100, series of 1879, from Headquarters of the Army, concerning details of officers of the Army at colleges, universities, &c., the following instructions from the Secretary of War, concerning the detail of retired officers at such institutions, under the act approved May 4, 1880, are published for the information of all concerned:

The act provides-

That upon the application of any college, university, or institution of learning incorporated under the laws of any State within the United States, having capacity at the same time to educate not less than one hundred and fifty male students, the President may detail an officer of the Army on the retired list to act as president, superintendent, or professor thereof; and such officer may receive from the institution to which he may be detailed the difference between his retired and full pay, and shall not receive any additional pay or allowance from the United States.

All officers detailed under section 1225, Revised Statutes, whether from the active or retired list, belong to the thirty officers distributed according to the annexed apportionment, and the institutions to which they are detailed are entitled to the arms provided by that section, under regulations published in General Orders No. 100, series of 1879, from Headquarters of the Army.

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Table showing apportionment of details, under section 1225, Revised Statutes.

• States and groups.	Aggregate population of States and groups.	No. of officers to which entitled.	States and groups.	Aggregate population of States and groups.	No. of officers to which entitled.
Maine New Hampshire Vermont	626,915 318,300 330,551		Alabama Mississippi Louisiana	996, 992 827, 922 726, 915	
a the factor is	1, 275, 766	1	freed with some first own	2, 551, 829	2
Massachusetts Connecticut Rhode Island	$1, 457, 351 \\537, 454 \\217, 353$		Texas}	818,579 484,471	
	2, 212, 158	2	al Adres Testin	1, 303, 050	1
New York Pennsylvania	$\begin{array}{c} 4,382,759\\ 3,521,951 \end{array}$	3	Tennessee Kentucky	1,258,520 1,321,011	• 1 1
New Jersey}	906,096 125,015		Ohio Indiana	2,665,260 1,680,637	$ \begin{array}{c} 1 \\ 2 \\ 1 \\ 1 \\ 2 \end{array} $
when the states	1,031,111	1	Michigan Illinois Wisconsin	1, 184, 059 2, 539, 891 1, 054, 670	$\frac{1}{2}$
Maryland	$780,894 \\ 442,014$		Missouri Iowa	$\begin{array}{c} 1,054,670\\ 1,721,295\\ 1,194,020 \end{array}$	1 1 1
and the second second second	1, 222, 908	1	Minnesota	439,706	
Virginia	1, 225, 163	1	Nebraska Kansas Colorado	$\begin{array}{r} 122,993 \\ 364,399 \\ 39,864 \end{array}$	
North Carolina}	1,071,361 705,606	1.11	(olorado)	966, 962	1
	1, 776, 967	1			
Georgia	1, 184, 109	12.0	California Oregon	560, 247 90, 923 42, 491	
Florida	$\frac{187,748}{1,371,857}$	1	Nevada)	42, 491 693, 661	1

BY ORDER OF THE SECRETARY OF WAR:

E. D. TOWNSEND, Adjutant General.

OFFICIAL:

Assistant Adjutant General.

WAR DEPARTMENT, Adjutant General's Office, Washington, May 25, 1880.

[Circular.]

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All officers detailed under section 1225, Revised Statutes, whether from the active or retired list, belong to the thirty officers distributed according to the annexed apportionment, and the institutions to which they are detailed are entitled to the arms provided by that section, under regulations published in General Orders No. 100, series of 1879, from Headquarters of the Army.

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Maine New Hampshire Vermont	626, 915 318, 300 330, 551	A State	Alabama Mississippi Louisiana	996, 992 827, 922 726, 915	
	1, 275, 766	1	Steam willing Indian	2, 551, 829	2
Massachusetts Connecticut Rhode Island	$1, 457, 351 \\537, 454 \\217, 353$	17 2.74 114(1-)	Texas} Arkansas}	818,579 484,471	
	2, 212, 158	2	al industrie are in	1, 303, 050	- 1
New York Pennsylvania	$\begin{array}{r} 4,382,759\\ 3,521,951\\ \hline 906,096\\ \end{array}$	3 3	Tennessee Kentucky Ohio	$1,258,520 \\1,321,011 \\2,665,260$	1 1 2
Delaware	125,015 1,031,111	1	Indiana Michigan Illinois Wisconsin	1,680,637 1,184,059 2,539,891 1,054,670 2,721,205	$ \begin{array}{c} 2 \\ 1 \\ 2 \\ 1 \\ 1 \\ 1 \end{array} $
Maryland	$780,894 \\ 442,014$		Missouri Iowa	1,721,295 1,194,020	. 1
Virģinia	$\frac{1,222,908}{1,225,163}$	1	Minnesota Nebraska Kansas	439,706 122,993 364,399 39,864	
North Carolina}	1,071,361 705,606	10.24	colorado	966, 962	1
Georgia}	1,776,967 $1,184,109$ $187,748$	1	California Oregon Nevada}	560, 247 90, 923 42, 491	
	1, 371, 857	1		693, 661	1

BY ORDER OF THE SECRETARY OF WAR:

E. D. TOWNSEND, Adjutant General.

OFFICIAL:

Assistant Adjutant General.

WAR DEPARTMENT, Adjutant General's Office, Washington, May 25, 1880.

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Table showing	apportionment	of	details,	under	section	1225,	Revised	l
		Ste	atutes.					

States and groups.	Aggregate population of States and groups.	No. of officers to which entitled.	States and groups.	Aggregate population of States and groups.	No. of officers to which entitled.	
Maine New Hampshire Vermont	$\begin{array}{c} 626,915\ 318,300\ 330,551 \end{array}$		Alabama Mississippi	996,992 827,922 726,915		
Maria Maria	1, 275, 766	1	We war the Bellins	2, 551, 829	2	
Massachusetts Connecticut Rhode Island}	$\begin{array}{r}1, 457, 351\\537, 454\\217, 353\end{array}$		Texas} Arkansas}	818,579 484,471		
	2, 212, 158	2		1, 303, 050	1	
New York Pennsylvania	4, 382, 759 3, 521, 951 906, 096	33	Tennessee Kentucky Ohio	1,258,520 1,321,011 2,665,260	1 1 2 1	
Delaware }	125,015	1	Indiana Michigan Illinois	1, 680, 637 1, 184, 059 2, 539, 891	$\begin{array}{c}1\\1\\2\\1\end{array}$	
Maryland	$ \begin{array}{r} 1,031,111 \\ \hline 780,894 \\ 442,014 \end{array} $	1	Wisconsin Missouri Iowa	$\begin{array}{c} 2,335,851\\ 1,054,670\\ 1,721,295\\ 1,194,020 \end{array}$	1 1 1	
	1, 222, 908	1 .	Minnesota	$\frac{439,706}{122,993}$		
Virginia	1, 225, 163	1	Colorado	364, 399 39, 864		
North Carolina}	1,071,361 705,606			966, 962	1	
Walter Star	1, 776, 967	1	California)	560, 247		
Georgia	$1,184,109 \\ 187,748$		Oregon	90,923 42,491		
	1, 371, 857	1		693, 661	1	

BY ORDER OF THE SECRETARY OF WAR:

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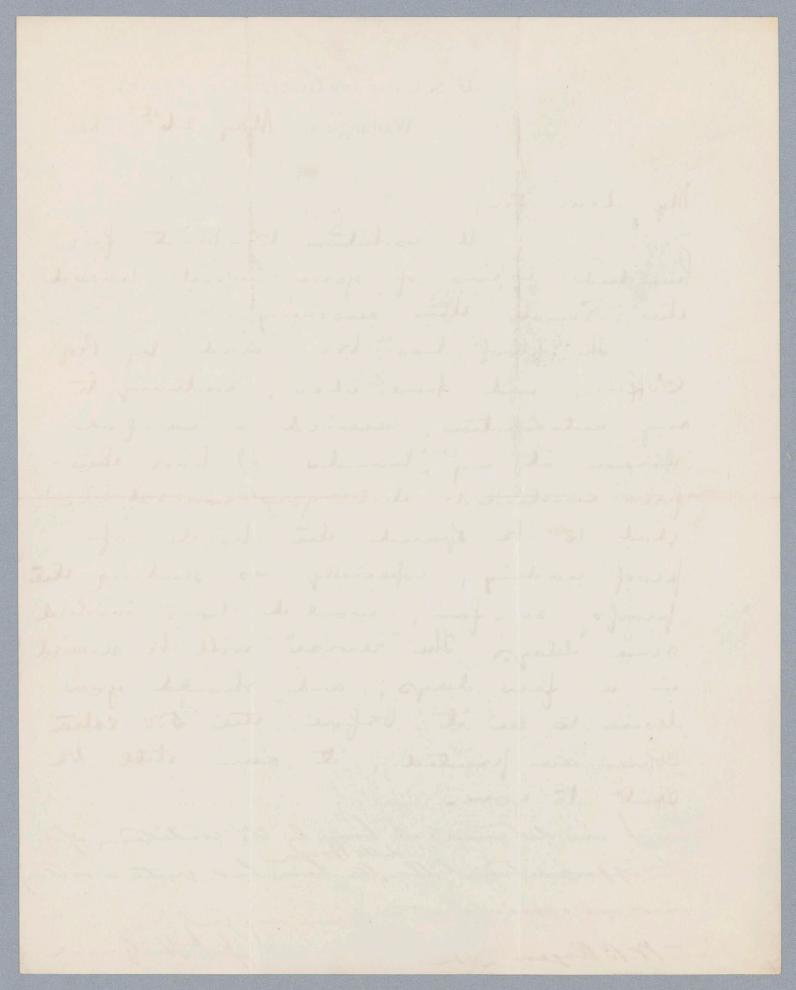
OFFICIAL:

Assistant Adjutant General.

U. S. COAST AND GEODETIC SURVEY OFFICE,

Washington, May 26, 1880.

My dear Sir; A resolution to print five hundred copies of your report passed the Sende this morning. The proof has teen read by Prof-Coffin, and has also, contrary to my articipation, received a careful revision at my hands. I have therefore concluded that you would be plad to be spared the house of proof-reading, especially as sending the proofs so far, would have involved some delay. The "revise" will be received in a few days, and should you desire to see it before the 500 Exha copies are printed, it can still be sent to you. I am detained at home by the condition of Lat House. Lad quite a vidage -man officer to your my tubilgan Prate Mr. B. Rogen _ h



DAILY ADVERTISER EDITORIAL ROOMS, 27 COURT ST.

BOSTON, May 24 th, 18 fr,

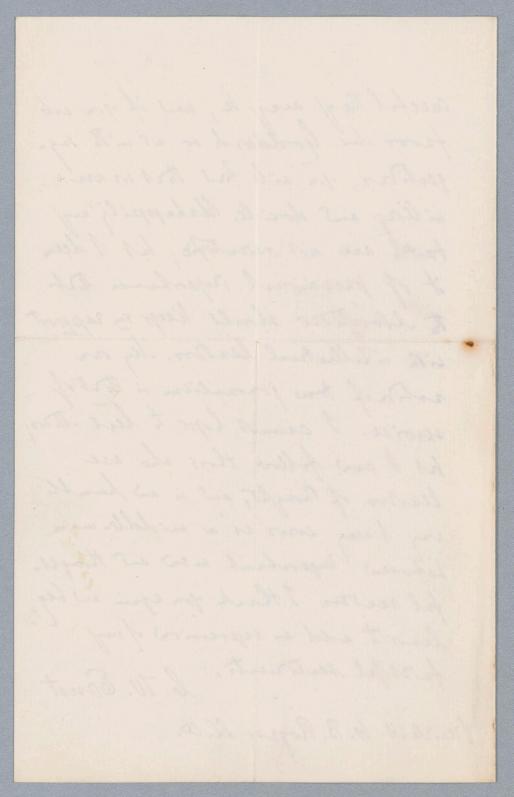
from C.W. Ernsti X

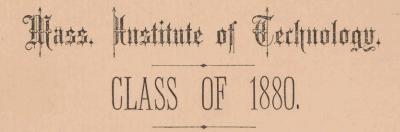
hlar Mr. Merident,

Alian to thank you for your great Kiesness in connection on the the Acarsenny celebration in the proceedings at the hustint. If you think my little reports and my Edi Romal paragraphs usages or with tappicitally to the point, I shall promisor you better work hereafter, when I hope to have the benefit of your abice. Ur. Goddard, my Kies formand priverpal, agrees with we that the

Instidute has special classes upon his columns and such abilities as as my han. I do ust like to entrust there in protant vecano to reporters, however

cureful they way to, and if you will froor der. Goddwird or me in The sag. gerlins, you will per that in an willing and docile. Mahappily my tasto are not scientific, but I deen it of paramount reportance the the Avourtides should keep in rapport with intellectual leadors. My own roting true journalitue is that of scroice. I cannot hope to leas there, ht I can follow those who are llastro of throught, and is and humble way I way sows as a widdle man between important wen and through. ful readers. I thank you again and beg lean to add an expression of my furtful sentiments, b. W. Ernst Rentlent W. B. Royen, L. CO.





GRADUATION EXERCISES,

THURSDAY, MAY 27TH, 3.30 P.M.

INTRODUCTION - PRESIDENT ROGERS.

PRESENTATION OF THESES.

READING ABSTRACTS OF THESES AND PRESENTATION OF DIPLOMAS: -

1. Geology of Norfolk County Basin.

GEORGE H. BARTON, North Sudbury.

2. Sudbury River Water Works.

CHARLES H. BROWN, Boston.

3. Solubility of Certain Salts in Sodium Thiosulphate. NATHANIEL C. SMALL, Boston.

4. Chelmsford Street Bridge, at Lowell, Mass.

EDWIN E. CHASE, Lowell. 5. Pan Amalgamation of Sullivan Ore from Maine.

FREDERIC W. CLARK, Chicago, Ill. 6. Mystic Water Works.

GEORGE W. HAMILTON, Boston. 7. Concentration of Zine Blende from Maine.

LORING R. MILLEN, Savannah, Ga. 8. History of Musical Pitch in Boston.

WILLIAM T. MILLER, Boston.

AWARD OF CERTIFICATES.

Address — REV. GEO. E. ELLIS, D.D. Count Rumford's Contributions to Applied Science.

Closing Remarks.

LIST OF DIPLOMAS AND CERTIFICATES AWARDED.

Degree of Bachelor of Science conferred on : --CHARLES H. BROWN, EDWIN E. CHASE, GEORGE W. HAMILTON,

In the Department of Civil Engineering.

GEORGE H. BARTON, FREDERICK W. CLARK, LORING R. MILLEN. In the Department of Mining Engineering.

NATHANIEL C. SMALL,

In the Department of Chemistry.

WILLIAM T. MILLER,

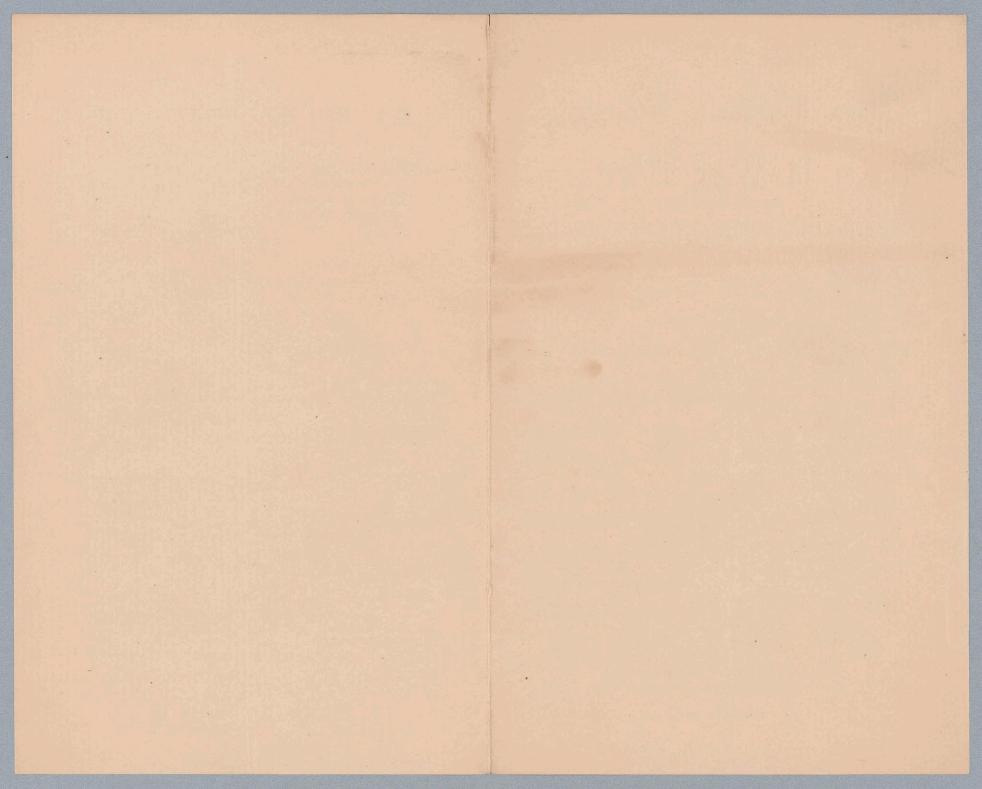
In the Department of Elective Studies.

Certificates awarded to: --

M. PENNOCK BARNARD, ARTHUR W. SANBORN,

Of the School of Mechanic Arts.

Certificates awarded to: --



Mass. Anstitute of Technology. CLASS OF 1880.

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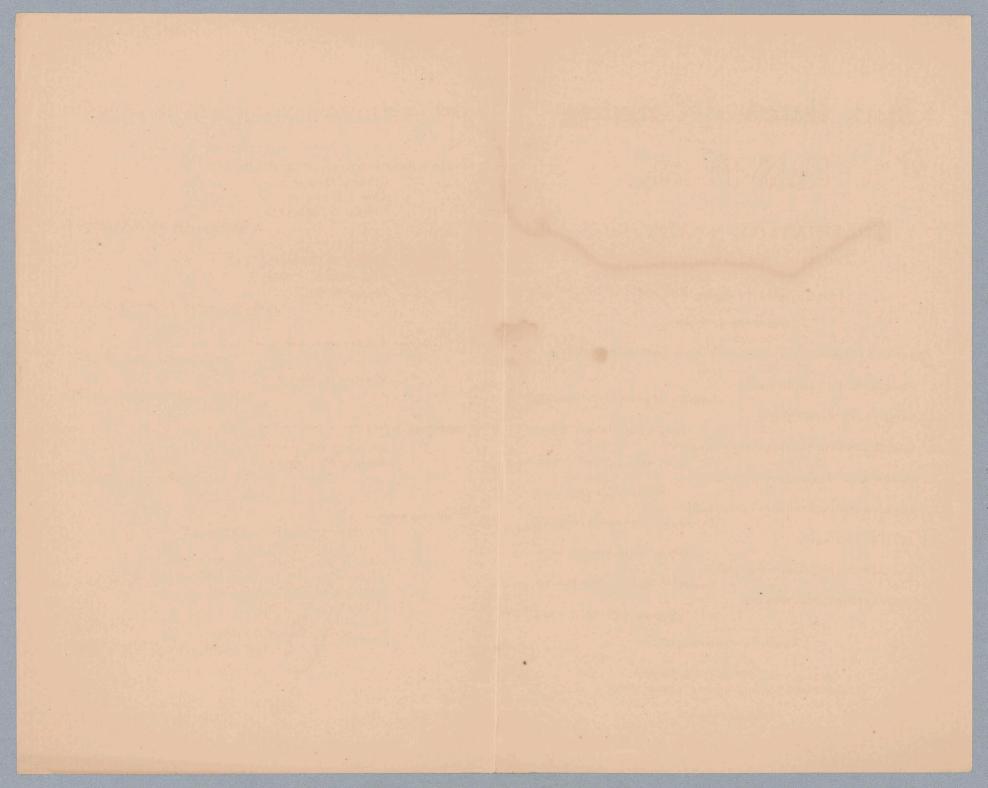
In the Department of Elective Studies.

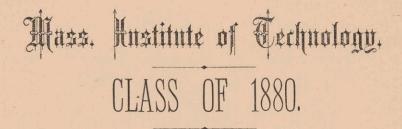
Certificates awarded to: --

M. PENNOCK BARNARD, ARTHUR W. SANBORN,

Of the School of Mechanic Arts.

Certificates awarded to: --





GRADUATION EXERCISES,

THURSDAY, MAY 27TH, 3.30 P.M.

INTRODUCTION - PRESIDENT ROGERS.

PRESENTATION OF THESES.

READING ABSTRACTS OF THESES AND PRESENTATION OF DIPLOMAS: -

1. Geology of Norfolk County Basin.

GEORGE H. BARTON, North Sudbury.

2. Sudbury River Water Works.

CHARLES H. BROWN, Boston.

3. Solubility of Certain Salts in Sodium Thiosulphate. NATHANIEL C. SMALL, Boston.

4. Chelmsford Street Bridge, at Lowell, Mass.

EDWIN E. CHASE, Lowell.

5. Pan Amalgamation of Sullivan Ore from Maine.

FREDERIC W. CLARK, Chicago, Ill.

6. Mystic Water Works.

GEORGE W. HAMILTON, Boston.

7. Concentration of Zinc Blende from Maine.

LORING R. MILLEN, Savannah, Ga.

8. History of Musical Pitch in Boston.

WILLIAM T. MILLER, Boston.

Award of Certificates.

Address — REV. GEO. E. ELLIS, D.D. Count Rumford's Contributions to Applied Science.

Closing Remarks.

LIST OF DIPLOMAS AND CERTIFICATES AWARDED.

Degree of Bachelor of Science conferred on : --CHARLES H. BROWN, EDWIN E. CHASE, GEORGE W. HAMILTON,

In the Department of Civil Engineering.

GEORGE H. BARTON, FREDERICK W. CLARK, LORING R. MILLEN. In the Department of Mining Engineering.

NATHANIEL C. SMALL,

In the Department of Chemistry.

WILLIAM T. MILLER,

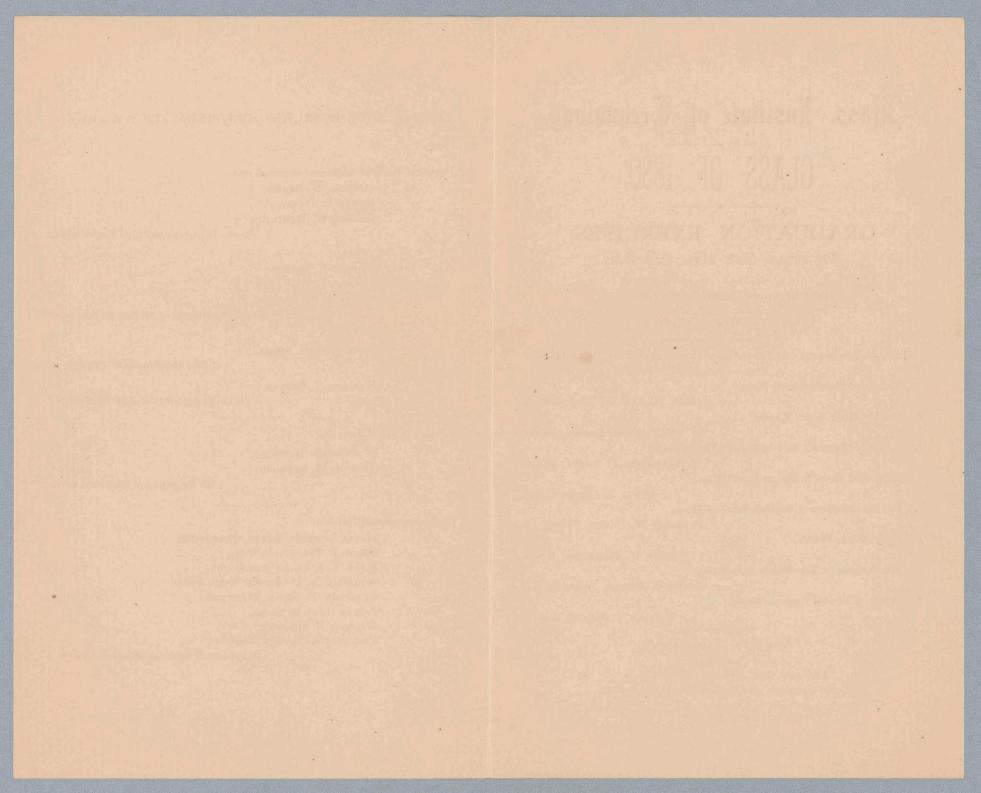
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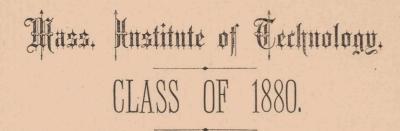
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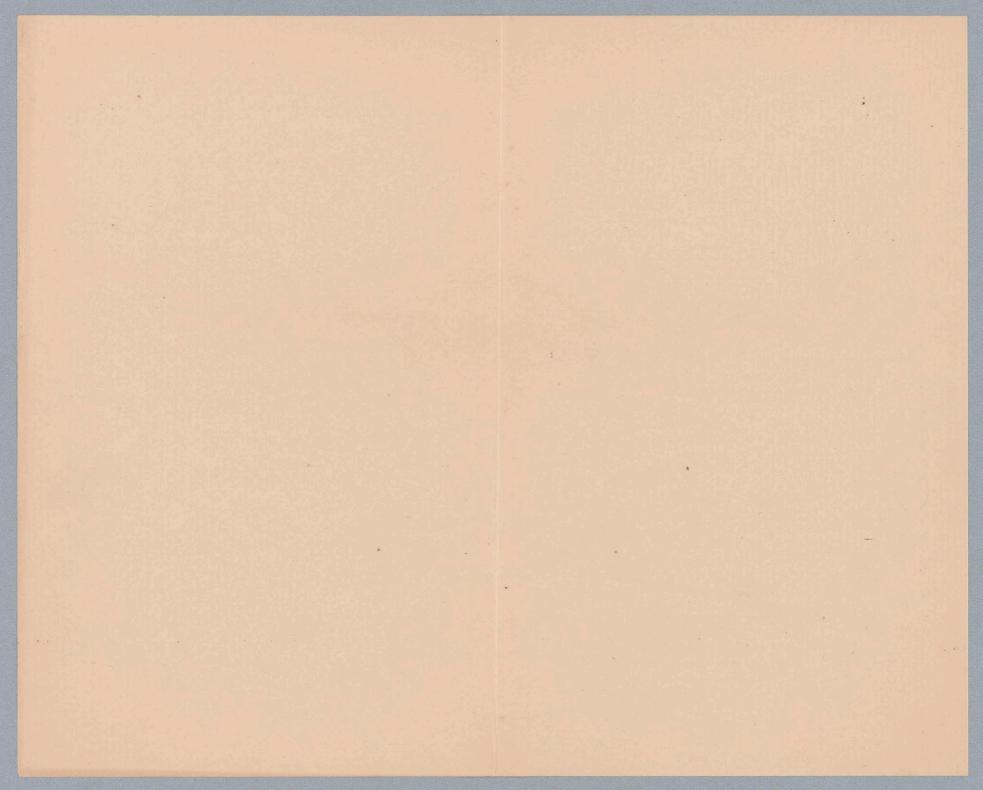
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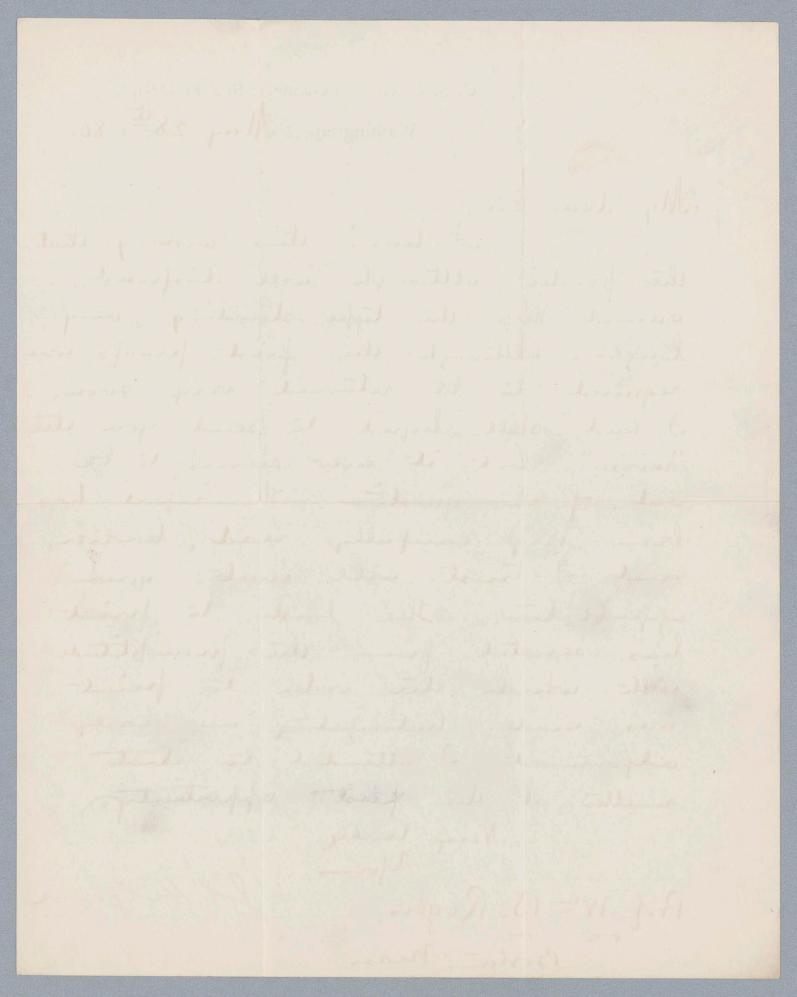
Of the School of Mechanic Arts.

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U. S. COAST AND GEODETIC SURVEY OFFICE, Washington, May 28 = 1880.

My dear sin; I learne this morning that the printers, although well disposed, cannot keep the type standing any longer. although the first proofs were required to be returned very soon, I had still hoped to send you the "revise", but it now seems to te out of the question. The report has been very confully read, however, and I trust will meet your approbation. The haste to print has resulted from the promptitude which the order to printwas made. Anticopating an sarly adjournet, I attended to that malter at the afirst it apportanting Neny hily My yours. J.R. Hilgan Prof. W= B. Rogers; te te Bortin, Mass.



19a, I Ar. Mas mythe b. Co, May 29, 1880 Brof. P. B. B. Rogers My dear for A Post. M. M. Brewer - Maj J. M. Blower elected members of the flat. acade of Sciences -Please sign Them & Dend Them to Post. Branch, mask him to pend than to Beo "Barrane The return to me. Hey truly yours J. Ho. C. Coff.

