13 Papers, November 1879

Popular Science Monthly,

549 & 551 Broadway,

New York, Nov. 1 1879

Professor Wm B. Rogers

Dear Sir

We are referred
[illegible] you for infor-
the subject of the
a disposition of
commendable cen-
r record; that
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t of the man and
ntry.
Let us our tract
have much trouble
ereby oblige
Truly
Pop. Sci Monthly
W. J. Youmans

The late Mr. U. A. Boyden, of Boston, leaves most of his money to be applied to the investigation of the properties and phenomena of heat, and what is left is to be devoted to the building of observatories for the gratuitous use of young students in astronomy.

New York Tribune
Oct. 30th 79

Popular Science Monthly,

549 & 551 Broadway,

New York, Nov. 1 1879

Professor Wm B. Rogers

Dear Sir

We are referred by Prof. O.C. Marsh to you for information concerning the subject of the enclosed clipping. Such a disposition of property, rare as it is commendable certainly deserves a fuller record; that should be given the widest circulation. We would like to do what we can toward both by publishing an account of the man and his bequest in the Monthly.

If you can put us on track of the facts without too much trouble to yourself it will greatly oblige

Yours very truly

Editors Pop. Sci Monthly

by W. J. Bowman

X

Boston, Nov. 2, 1879.

Dear Prof. Rogers,

As the new catalogue will soon be ready for publication, I would like to suggest a slight change in the wording of Prof. Runkle's professorship, viz.- the omission of the word "higher" before "mathematics." This word was inserted about five

years ago. It of course gave the impression that certain advanced subjects in mathematics were taught by him. Such was not the case. He was not teaching at all then, had not taught anything for one or two years previous, and has taught nothing since that time.

I have always regarded it as an injustice to me, as it is a virtual misstatement of the working of the department.

The matter is not a proper one for the consideration of the Faculty, and I respectfully ask your attention to it before the catalogue receives its final sanction from the corporation.

Very sincerely yours,

Geo. A. Osborne

Mass. Institute of Technology.

BOSTON, Nov. 3d 1879

Dr Cotting

Dear Sir,

It is obviously proper that the watchman of our building and I also should have access to any room in the building at any time of the day or night, and we should, I fear, have trouble with the insurance companies if it were known to be otherwise. But I find that Huntington Hall has been kept locked with the key left in the lock inside, and Mr Pierce tells me that it is his understanding that he has a right to resort to this sort of exclusion. Now I know that you cannot have given him any authority for so absurd a proceeding. Will you please

therefore to rectify Mr Pierce's understanding? We must insist that the hall shall be accessible to properly authorized persons at any time, days, nights, and Sundays. It is rather annoying to be obliged to appeal to you about a trifling matter of this sort, but nothing seems to avail with your janitor except a positive order from you.

Very truly yours
John M. Ordway

Nov. 3d 1879

Dear Mr. Lowell,

I enclose a letter received this afternoon from Prof. Ordway — holding myself in readiness to follow any instructions you may give me relative to the matter he writes about.

Very truly yours
B. E. Cotting

Augustus Lowell, Esq.

MUSEUM OF FINE ARTS
BOSTON MASS FOUNDED A.D. 1870
ART EDUCATION RESEARCH

Boston November 4th 1879.

My dear Sir:

Allow me to call your attention to the fact that the term of office of the three Trustees elected by the Institute of Technology to serve upon the Board of Trustees of the Museum of Fine Arts expires with the current year.

The next regular meeting

[Nov. 4, 1879]

of the Museum Trustees will be held January 15. 1880, and the new Trustees should be qualified to act at that date.

Messrs. A. H. Rice
M. Duncan Ross
Henry B. Rogers

the gentlemen who now hold the positions specified are

I am
Very respectfully yours,
E. H. Greenleaf,
Secretary.

Wm. B. Rogers Esq.
President,
Mass. Inst. of Technology.

17. Pemb. Sq.
Boston Nov. 4. 79

Professor Rogers,

My dear Sir,

I thank you for your kind suggestions respecting the Soc. of Arts.

I have seen Mr. Edward Atkinson, & he will give us two lectures - the first, on matters relating to textures & fibres for manufacture, or some such subject: & the second - on slow burning methods of Combustion or a kindred subject. These will occupy, probably, the evenings of Dec. 11th & 25th - (the 27th of Nov. being Thanksgiving day) & of course, no lecture.

Our next meeting (Nov 13th) is to be occupied by Mr. Eliot C. Clarke, Civil Engineer, the assistant of Mr Davis - the City Engineer, who has the charge of the Great Drain or City Sewer - & who will give an Account of the New intercepting System of Sewerage, at Boston - He is a son of Rev. Jas. Freeman Clarke & perfectly competent - Mr. Davis recommended him - as he (Mr D.) cannot speak long owing to a throat trouble: but he will be present -

You will see that we shall be well provided for, at the outset. All went off well at our last meeting - A Committee of Ten was chosen on By-Laws. as you requested.

Very faithfully Yr obt Svt
F. W. Farther

MASSACHUSETTS INSTITUTE
OF TECHNOLOGY.

November 6 1879

John A. Lowell Esq
No 7 Park St Boston
My dear Sir
In behalf
of two members of our board
of instruction, I respectfully
ask permission to make
one change in the programme
of the "Lowell Free Courses
of instruction, which I presume
you have received from President
Rogers.

The change which is
desired is to omit from
the list:-
"12 lectures on the chemistry
of the non metallic elements
by Prof Wm R. Nichols"
and to insert in the
place of the above:-

"12. Lessons in French
by M. Jules Luquiens"

The above change is suggested, in behalf of Monsieur Luquiens, who is in need of the remuneration derived from the course, by Professor Wm R. Nichols who will gladly withdraw in behalf of the former.

I hope that you will find that you can grant the request

Respectfully Yrs
Robert H. Richards
Sec.

Ack. Accd.

1021 Clinton Street
Philadelphia 6th November 1879

Dear Sir. 1241

A day or two since I received a letter from Dr. E. L. Youmans, of New York, a co-trustee of the Lazarus Fund, in which he tells me of an interview with you relating to that Fund and asking that I shall send you a statement of its affairs. The original deed of trust is now in my possession, having, until his death, been held by Professor Joseph Henry, but I have no copy of it. You will, however, find it in full in the Smithsonian Report for 1872, to which document, pp. 104-106, I respectfully refer you. As you will observe, all vacancies occurring in the Board of Trustees shall be filled by the President of the National Academy of Sciences, and a vacancy now exists, caused by Professor Henry's death. Dr. Youmans and myself have had some

correspondence on the subject of the ap-
-pointment of trustees, with a reference to
their local residence; he thinking, with
a good deal of force, that it would be
better to have all three (3) trustees resi-
-dents in one place for the sake of con-
-sultation and prompt action in the af-
-fairs of the Trust. While admitting the
much greater convenience of this I
think it better, for carrying out the
purposes of the Trust, and to avoid even
the seeming of local prejudice or parti-
-ality, to have the Trustees from several
different states of the Union. This
will involve more trouble but will, I think,
be more generally satisfactory. It is
quite desireable that the Board of Trust-
-ees shall be filled, as the time has
nearly or quite arrived for the carrying
out of the objects of the Trust, i.e. of
sending abroad students or "pupils
who may evince decided talents in
physics" for four years of scientific
study and work. The Trustees, hitherto,
have been unanimously of opinion that
the Fund should be allowed to accumulate
until the interest upon it (when perma-
-nently invested) should amount to or
over one thousand (1000.) dollars per
annum and thus keep two pupils
or students permanently at study or
original investigation — allowing five
hundred (500) dollars per annum for
each student. As you will see in the
following financial statement, the time
for sending pupils has nearly or quite
arrived and the next Spring (1880) was
tacitly understood to be the time for
such beginning. It is also desireable
that the Trustees should meet soon for
the purpose of determining the manner
and time of selection of pupils and
for other objects connected with the Trust.
Please pardon my suggestion that the
vacant trusteeship should be filled by
some one not residing at so great a

distance as to make an occasional meeting of Trustees too onerous upon any one or more of them. The funds of the Tyndall Trust are now invested in eighteen thousand (18.000.) dollars of 7 per cent Lehigh Valley Rail Road bonds, worth to day at 23 per centum premium $22.140. and cash in bank, in my name, $1037.— or a total cash value of $23.177.— subject, of course, to any fluctuation of market values. But as this is not a legal trust investment (although entirely safe) it will be necessary to change it for some legal securities, which at the present time are very high. This and other matters will have to be arrang-ed and therefore with Dr. Youmans I would respectfully ask you to fill the vacancy now existing in the Board. With much respect I am very truly Yours

Hector Tyndale
Trustee Tyndall Fund &c

To Professor William B. Rogers
President National Academy
of Sciences &c

145

BOSTON SOCIETY OF NATURAL HISTORY,
COR. BERKELEY AND BOYLSTON STS.,
Boston, Mass., Nov. 8 1879

Dear Prof. Rogers

The present year is that in which the "Grand Honorary Prize", founded by Dr Walker, should be awarded. You may remember that Mr Alex Agassiz received the last for his work on Echinoderms. The provisions are: "The Council of the Society may, once in five years, award the sum of $500 for such

scientific investigation or discovery in natural history as may seem to deserve it; provided that said investigation or discovery shall have prior thereto been made known & published in the United States, & that this shall have taken place at least one year previous to the time of award. If any such investigation or shall prove of extraordinary merit, the council may award the sum of $1000."

(Mr. Agassiz was awarded $1000)

By the council rules

"there persons from among eminent men of science in the U.S. shall be requested to act as a committee to recommend to the Council the names of one or more persons as most deserving of the prize." The Council has received of report the services of this year of Gurney, Wood & Rau. Theo. Gill, Lyman, & Hyde. You may be willing to contribute the consideration of the officers. The recommendation of the Committee should be made

before Dec. 15th. If you decide I can request Mess. Lyman or Goodale to meet you at any time & place which you may find convenient.

Yours very sincerely

Edward Burgess

Secy

To

Prof. W. B. Rogers

Hanover Polytech. Instit
Nov 10th 1875.

(X)

Prof William B. Rogers
President Mass. Instit Technology

Dear sir,

I take the liberty of asking you to send me a copy of the Institute of Technology programme or catalogue which would prove of great interest to members of the engineering profession here. – I should be happy to send a copy of the programme of the Royal Technical Polytechnic here if it should prove of interest

Believe me, sir very truly yours

Henry Goldmark

Technische Hochschule

Hanover Germany. –

Mass. Institute of Technology.

BOSTON, Nov 11 1879.

Dear Sir.

Mr Lee, whose card is enclosed, and who says you know him, has requested the use of our Drill Hall for a dinner to the news boys on Thanksgiving Day. Mr Lee has been here several times, and called again this morning, having previously been told that no answer could be given him until you returned. The entertainment will put us to no expense, and I, for my part, have no objection. How do you feel on the matter?

Yours sincerely

Wm Wm Sallows Jr.

Wm B. Rogers
Pres

Lowell Mass, Nov. 18. 1879

My dear Sir,

In reply to your note of the 15th inst. relating to the late U. A. Boyden I have to say, that the obituary you refer to in the Boston Daily Advertiser was written by me & I have no reason to doubt its correctness. The account of his scientific work is very meagre but I should be unable to enlarge upon it except in a general way ~~and~~ or by collecting new material.

Edward S. Ritchie & Sons, Philosophical instrument makers, 150 Tremont Street Boston, have been much employed by Boyden for some years and are better able than anyone I know to give information as to his scientific work during the latter part of his life, and I am sure they would be pleased to respond to any inquiries that might be made of them.

Boyden had many peculiarities, but the most marked in his scientific work, to my mind, was the extraordinary pains he took to eliminate error. Messrs. Ritchie have related to

[11/18/1879]

The last will of U. A. Boyden was made Oct. 5. 1879 - twelve days before his death.

After bequeathing Eight thousand dollars to relatives & friends, and his papers, models &c, relating to turbines, the rest of his estate is devised to three Trustees, viz Prof. William B. Rogers, William G. Russell & James B. Francis.

"To expend so much of the income & principal "thereof as the said trustees, or a majority of them, "may deem expedient, in the scientific investigation "of the properties of Caloric and the phenomena "relating thereto; such investigation to be continued "so long, and to such an extent as the said trustees, "or the majority of them, shall think expedient "and proper, and in printing and publishing "such of my own investigations as I may have "in manuscript, and such as they may procure "to be made under this my will, as they may "deem expedient.

"My will is that whenever said trustees, or a "majority of them, shall deem it inexpedient to "continue said investigations of the properties of "Caloric and the phenomena relating thereto, any

"longer, all the property then remaining in their hands
"under this will shall, at such time as they shall
"deem expedient, be devoted and appropriated by them,
"or a majority of them, to the Establishment and
"maintenance of an astronomical observatory, on
"some mountain peak; but if the property so remaining
"in the hands of said trustees, shall by them, or a major=
"ity of them, be deemed insufficient for that purpose, then
"my will is that the same be allowed to accumulate
"until the fund is sufficient for the purpose aforesaid,
"or until such time as my said trustees, or a majority
"of them, shall see fit to appropriate the same thereto,
"or to bestow the same upon some observatory existing
"upon a mountain peak or contribute the same in
"aid of the Establishment or maintenance of an As=
"tronomical observatory at such an elevation, as to
"be free, so far as practicable, from the impediments
"to accurate observations, which occur in the Observa=
"tories now existing, owing to atmospheric influences."

me some of his remarkable doings in this direction, which I cannot recall with sufficient accuracy to repeat, but which I have no doubt they would be willing to furnish for the purpose now required –

The theory of heat had occupied Boyden's attention for many years – About the year 1842, as he told me, he presented a paper to the American Academy of Arts & Sciences on the development of heat by the friction of gases, this was referred to a Committee who reported somewhat in defiance, which displeased him to such an extent that he withdrew from the Academy. I have no doubt his paper was written in an obscure manner, and was in advance of the time, possibly the records of the academy may afford some clue to the subject and very likely the original or a copy may be found among his papers, but his will has not yet been admitted to probate & no one is authorized to examine what he has left.

I enclose some extracts from the will & the obituary from the Advertiser. Very truly yours

James B. Francis

Prof. W. B. Rogers
Boston.

1879

Meeting of Comm: on School. Nov. 20. 1879

at 117 Marlboro-St. present Atkinson, Carson, E S Phelps, J. D. P. Paine, H. B. Rogers & W B R.

1 – Mr Hemenways reply to my letter – see proc: of Oct. 8,

2 – The application of Mr. Woodbridge to be allowed to pursue Chemistry instead of Zoo. on condition that he pays for re-agents & gives a part of his time to the Cabinet of Appl: for Physical Lab: was granted –

3 – Prof: Waldo's plan as first proposed could not be carried out – The Corp: of Yale Coll: will give him a plan in connection with their new Observatory, & a building erected for his purpose, & put in his charge as Prof.

4. The Faculty recommend William H Pickering, graduate of 1879 to be admitted to one of the Advanced Classes, or Scholarships as they are called in the Catalogue.

adopted

5. State the arrangement made with Mr A Somela for our access to the Lazy Hale, & the occasion of it.

6. Mention what has occurred in regard to the U S Arms in our charge. Mr Paine & E S Phelps to comm: to ascertain the present state of the matter & advise what should be done.

7 – Report of Comm: on Status of Woman's Laboratory. Shall anything be added on this subject in the Catalogue, or would it not be wiser to let it rest for the present – Adopted.

8. Shall not Solid & Spherical Geom: be omitted from Conditions of Adm: Practically they are rarely attended to & they form a bugbear to applicants.

V 9 – The Catalogue is in course of preparation –

GENERAL ORDERS No. 100.

HEADQUARTERS OF THE ARMY,
ADJUTANT GENERAL'S OFFICE,
Washington, November 21, 1879.

[Extract from the Revised Statutes of the United States.]

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 hundred 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 any time, and they shall be apportioned throughout the United States, as nearly as may be practicable, according to population. Officers so detailed shall be governed by general rules prescribed, 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 property, 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 compensation.]

I. The following regulations, in regard to detail of officers of the Army at established colleges 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 practicable 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 detached 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 this duty among the thirty authorized. Besides this number, any retired officer may arrange to serve at a college or university without detail from or reference to the War Department; but unless *detailed* under Section 1225, Revised Statutes, such service will not entitle the institution to the arms, &c., provided by that section.

4. No detail will be made for any institution except upon an application from its proper representatives, nor will any officer be so detailed

unless acceptable to the authorities of the institution, 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 accouterments, which may be issued for the purpose 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	$900 00
2 carriages and limbers, 3-inch gun, at $325	650 00
2 gunner's haversacks, at $3.35	6 70
2 handspikes, trail, at $1	2 00
4 lanyards, at 10 cents	40
2 priming-wires, at 10 cents	20
4 sponges and rammers, 3-inch, at $1	4 00
4 sponge-covers, 3-inch, at 30 cents	1 20
2 tube-pouches, at $1.50	3 00
4 thumbstalls, at 20 cents	80
2 tompions, 3-inch, at 30 cents	60
2 vent-covers, at 40 cents	80
1 pendulum hausse, 3-inch	2 50
1 pendulum hausse seat	60
1 pendulum hausse pouch	75
2 paulins, 12 by 15 feet, at $11.75	23 50
150 Springfield "cadet" rifles, cal. .45, with appendages, &c., at $18	2,700 00
150 bayonet scabbards, steel, cadet, at 91 cents	136 50
150 waist belts and plates, at 50 cents	75 00
150 cartridge-boxes, cal. .45, 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 Ordnance 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."

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

Form of bond.

Know, all men, by these presents that we [*name of the college or university, if an incorporated institution; if not, the name of a person described as president or other officer of the college or university, naming it In case nobody should be legally empowered to bind the college, &c., by a bond, the obligors may be any person or persons who may be willing to answer for the performance of the obligation by the college, and who will then execute as principals, without any further sureties*], as principal , and ——— ———, of ———, and ——— ———, of ———, as sureties, are held and bound to the United States of America in the penal sum of [*double the value of articles*], for the payment of which, well and truly to be made to the Secretary of War, or to such officer or person as he may designate, we do bind ourselves and each of us, jointly and severally, firmly by these presents. Given under our hands and seals at [*place of execution*] this —— day of ———, A. D. 18—.

The condition of this obligation is such, that whereas the [*name of "college" or "university"*] is an established [*college or university*] within the United States, having capacity to educate at the same time not less than one hundred and fifty male students; and whereas the said [*college or university*] has heretofore applied to the President of the United States to detail an officer of the Army to act as [*president, superintendent, or professor*] thereof, and the President, by virtue of the authority vested in him by section 1225, Revised Statutes, has detailed such an officer to so act accordingly; and whereas the Secretary of War, by the authority vested in him by said section, is about to issue to the said [*college or university*], for the military instruction and practice of the students thereof, the following [*small-arms and (or) pieces of field artillery*], to wit [*naming*

and describing the articles in detail, adding value of each where practicable], being together of the value of [*the total value*]; all of which property, when issued, the said [*college or university*] hereby agrees to account for quarterly on blank forms to be prescribed by the Chief of Ordnance, and to return all of said property to the Chief of Ordnance, or such officer or person as may be designated to receive the same, within thirty days after demand by the Secretary of War:

Now, therefore, if the said [*college or university*] shall take good care of and safely keep and account for the said [*small-arms and (or) pieces of field artillery*], and shall, when required by the Secretary of War, duly return the same within thirty days in good order to the Chief of Ordnance United States Army, or such officer or person as the Secretary of War may designate to receive them, then this obligation shall become inoperative and void; otherwise, shall be and remain in full force and virtue.

——— ———. [SEAL.]

The corporate name of the college, &c., or the name of the individual representing it, who should sign *as president*, &c., of the college, naming it.

Corporate seal, if any exists, and the college executes; if not, an ordinary seal.

——— ———. [SEAL.]
Name of surety or other principal.

——— ———. [SEAL.]
Name of surety or other principal.

In presence of us—

——— ———.

——— ———.

The signatures (or any signature made separately) should have two subscribing witnesses.

Form of justification by surety, or principal answering for the college, &c., where there is no surety as such.

STATE OF ———,
County of ———, *ss:*

I [*name*], one of the [*sureties or principals*] named in the within bond, do swear that I am worth the sum of [*full amount of the penalty*] over and above all my debts and liabilities.

——— ———.
Signature.

Before me—

——— ———.

(Signature of notary, &c., with official seal, if any.)

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 rounds 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.

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 ordnance 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 referred to the Attorney General, that the bond of the institution may forthwith be put in suit.

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.

BY COMMAND OF GENERAL SHERMAN:

E. D. TOWNSEND,
Adjutant General.

OFFICIAL:

Assistant Adjutant General.

GENERAL ORDERS No. 100.

HEADQUARTERS OF THE ARMY,
ADJUTANT GENERAL'S OFFICE,
Washington, November 21, 1879.

[Extract from the Revised Statutes of the United States.]

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unless acceptable to the authorities of the institution, 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 accouterments, which may be issued for the purpose 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	$900 00
2 carriages and limbers, 3-inch gun, at $325	650 00
2 gunner's haversacks, at $3.35	6 70
2 handspikes, trail, at $1	2 00
4 lanyards, at 10 cents	40
2 priming-wires, at 10 cents	20
4 sponges and rammers, 3-inch, at $1	4 00
4 sponge-covers, 3-inch, at 30 cents	1 20
2 tube-pouches, at $1.50	3 00
4 thumbstalls, at 20 cents	80
2 tompions, 3-inch, at 30 cents	60
2 vent-covers, at 40 cents	80
1 pendulum hausse, 3-inch	2 50
1 pendulum hausse seat	60
1 pendulum hausse pouch	75
2 paulins, 12 by 15 feet, at $11.75	23 50
150 Springfield "cadet" rifles, cal. .45, with appendages, &c., at $18	2,700 00
150 bayonet scabbards, steel, cadet, at 91 cents	136 50
150 waist belts and plates, at 50 cents	75 00
150 cartridge-boxes, cal. .45, 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 Ordnance 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."

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

Form of bond.

Know, all men, by these presents that we [*name of the college or university, if an incorporated institution; if not, the name of a person described as president or other officer of the college or university, naming it In case nobody should be legally empowered to bind the college, &c., by a bond, the obligors may be any person or persons who may be willing to answer for the performance of the obligation by the college, and who will then execute as principals, without any further sureties*], as principal , and ——— ———, of ———, and ——— ———, of ———, as sureties, are held and bound to the United States of America in the penal sum of [*double the value of articles*], for the payment of which, well and truly to be made to the Secretary of War, or to such officer or person as he may designate, we do bind ourselves and each of us, jointly and severally, firmly by these presents. Given under our hands and seals at [*place of execution*] this —— day of ———, A. D. 18—.

The condition of this obligation is such, that whereas the [*name of "college" or "university"*] is an established [*college or university*] within the United States, having capacity to educate at the same time not less than one hundred and fifty male students; and whereas the said [*college or university*] has heretofore applied to the President of the United States to detail an officer of the Army to act as [*president, superintendent, or professor*] thereof, and the President, by virtue of the authority vested in him by section 1225, Revised Statutes, has detailed such an officer to so act accordingly; and whereas the Secretary of War, by the authority vested in him by said section, is about to issue to the said [*college or university*], for the military instruction and practice of the students thereof, the following [*small-arms and (or) pieces of field artillery*], to wit [*naming*

and describing the articles in detail, adding value of each where practicable], being together of the value of [*the total value*]; all of which property, when issued, the said [*college or university*] hereby agrees to account for quarterly on blank forms to be prescribed by the Chief of Ordnance, and to return all of said property to the Chief of Ordnance, or such officer or person as may be designated to receive the same, within thirty days after demand by the Secretary of War:

Now, therefore, if the said [*college or university*] shall take good care of and safely keep and account for the said [*small-arms and (or) pieces of field artillery*], and shall, when required by the Secretary of War, duly return the same within thirty days in good order to the Chief of Ordnance United States Army, or such officer or person as the Secretary of War may designate to receive them, then this obligation shall become inoperative and void; otherwise, shall be and remain in full force and virtue.

——— ———. [SEAL.]

The corporate name of the college, &c., or the name of the individual representing it, who should sign *as president*, &c., of the college, naming it.

{Corporate seal, if any exists, and the college executes; if not, an ordinary seal.}

——— ———. [SEAL.]
Name of surety or other principal.

——— ———. [SEAL.]
Name of surety or other principal.

In presence of us—

——— ———.

——— ———.

The signatures (or any signature made separately) should have two subscribing witnesses.

Form of justification by surety, or principal answering for the college, &c., where there is no surety as such.

STATE OF ———,
County of ———, *ss:*

I [*name*], one of the [*sureties or principals*] named in the within bond, do swear that I am worth the sum of [*full amount of the penalty*] over and above all my debts and liabilities.

——— ———.
Signature.

Before me—

——— ———.

(Signature of notary, &c., with official seal, if any.)

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 rounds 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.

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 ordnance 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 referred to the Attorney General, that the bond of the institution may forthwith be put in suit.

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.

BY COMMAND OF GENERAL SHERMAN:

E. D. TOWNSEND,
Adjutant General.

OFFICIAL:

Assistant Adjutant General.

Columbia College,
New York.

President's Room, Nov. 22, 1879.

My Dear Prof.,

I have just returned from Utica, where I have been for the past two or three days, to meet with the Board of Commissioners on the State Survey, which was revived by act of the last legislature of New York, for consideration and report, the project of establishing a sort of governmental protection over the grounds and scenery in the neighborhood of Niagara Falls. I find on my

desk at my return, your communication of the 18th inst. offering to me the appointment of trustee of the Tyndall Fund to fill the vacancy occasioned by the death of our lamented friend, Prof. Henry.

I feel highly flattered by this selection, and complimented by the terms in which you offer me a trust of so high responsibility. And accept the appointment with pleasure, and will endeavor, to the best of my ability, to cooperate with my associate trustees in carrying out the views of the generous founder of this fund. I shall do this with the more satisfaction, from my sincere personal regard for Prof. Tyndall, and the admiration I entertain for him as a man and as an accomplished and successful investigator of the phenomena of nature.

Ib

I am, my dear Professor,
Very sincerely,
Your obt servt,
F. A. P. Barnard.

Prof. Wm. B. Rogers.

Mass. Inst. Technology,

X

Boston, Nov 22 1879

Pres.t Wm. B. Rogers

My dear Sir

The accompanying note was handed to the secretary of the Faculty and referred to the Chairman and to the President.

Upon consultation it seemed more fitting that it should go before the Committee on the School, as the Faculty do not think it is within their province to decide in this case

Respectfully yrs

Robert H. Richards

sec.

Prof. Wm. B. Rogers.

11554

War Department

Washington City.

November 26th, 1879.

Sir:

I have received your letter of the 30th ultimo and its enclosures, in behalf of the revocation or suspension of the order requiring the return to the Government of the ordnance and ordnance stores loaned by it to the Massachusetts Institute of Technology at the time of the detail thereat of an Army officer as Military Professor, and regret to inform you of the inability of the Department to comply with your request. No officer of the Army

being now on duty at the Institute, and it being impracticable to detail another there, authority cannot legally be granted to retain the arms &c. in question, but under the law they must be restored to the United States as stated in the letter of the Chief of Ordnance, herewith returned.

Very respectfully,
your obedient servant,
Geo. W. McCrary
Secretary of War.

Hon. W. A. Field, M.C.,
Boston, Mass.

JOSEPH W. ROBBINS,

Negotiator of Bonds, Commercial Paper, Sterling Exchange, Mortgages, etc.,

No. 12 Merchants Bank Building, 28 State Street,

(#13, Regent Street.)

Boston, Nov'r 28. 1879.

Prof. Wm. Ripley Nichols,

Dr. Sir.

Your favor of the 28th to your father — my esteemed friend — is before me, through his courtesy & attention. Many thanks, to both.

I sought the position of Military Instr for my nephew, Mr. Francis Lowell Hills, born, bred & "brought up" in Boston.

He was, I think, the first West Point Cadet selected by competitive examination, instead of by appointment & was the successful one among about 40 applicants examined.

He graduated from W.P. and entered the Army as 2d. Lieut. Was stationed awhile at Fort Adams, Newport & later at Dry Tortugas, off Florida.

Being there in Summer & taken down with fever, by advice of the Doctor at the "Post", he resigned his position, to save his life,

He has been Prof. of "Military Science", teacher* of French &c. about 2 years at the "Maine State College", Orono, Me, but was obliged to leave there, as also two other Prof's, because, in a fit of economy, the Legislature made no appropriations for the three. — A week or two before the expiration of his time there, he rec'd an appointment on the "Board of Light-House Engineers" (Oct 1878, I think,) Charleston S.C. where he now is, with his wife and three children.

The climate there, does not suit him, and he would be very glad to come North, if he could get the same, or about the same, (I suppose,) salary & a permanent situation. If you could inform me as to the salary & permanency, I shd be glad to communicate with him, or you or any one else could do so.

My impression is that he has $1500. (or $1800.) I am not sure which, but believe that he had $1200. at the beginning, and commanding officer liked him so well, that $300. were added — I know that was the amt added. His character, habits, &c. of the purest & best, in every respect.

Very respy yrs &c. Joseph W. Robbins.

*Added to his duties after he went there & not in the original agreement.

HARVEY JEWELL. WALBRIDGE A. FIELD. EDWARD O. SHEPARD.

JEWELL, FIELD & SHEPARD,
COUNSELLORS AT LAW,
EQUITABLE BUILDING,
ROOMS 36, 37 & 38,
150 DEVONSHIRE, COR. MILK ST.

Military

BOSTON, Nov. 25 1875.

Dear Sir,

I have received the inclosed letter from the Defendant's Mr. C. I regret that the application has been not more successful

Yours respectfully,
W. A. Field.

John D. Runkle M.D.
Newton Highlands,

Mass. Institute of Technology.

CHEMICAL LABORATORY.

Boston, Nov. 29, 1879.

President Rogers:

Dear Sir:

Sometime ago a friend of mine inquired about the position of military instructor at the Institute. Knowing that at the present time the matter was under discussion, I thought it would be well to ascertain about the gentleman who had been mentioned to me 18 months ago.

The inclosed letter tells its own story. I suppose the Institute will hardly pay the salary that the gentleman in question is now receiving unless he were to give instruction in other subjects. If, however, it should prove desirable to have a man of this calibre I think the person mentioned in this letter would probably suit. I will ask you therefore to put the letter on file in case of need, and thus oblige,

Yours respectfully,

Wm Popey Nichols

Nov. 29, 1879 x

From Prof. Nichols
inclosing letter from Jos. W. Robbins
recommending Barnas Sands Mills
as Military Instructor —

Portsmouth N.H.
30 Nov. 1879

Prof W. B. Rogers,
Dear Sir:

I trouble you again to say that Professor Eliot laid the matter of establishing the branch of Steam-Engineering and iron Ship-building before the corporation to come up again next month for consideration.

I told Professor Eliot that you proposed to confer with him very soon on the plan.

I am in receipt of a letter from Captain Luce in which

He wished me to call your attention to the two recent graduates of the Engineer class at the Naval school who had to go to England to the Royal Naval College, to get a knowledge of ship construction and designing. He seems to favor the Institute for a trial of the plan, thinking it would meet with better success. I learn that several Engineer officers have already accepted position in other Colleges as instructors. Trusting that the plan will be furthered I remain very truly

Edward Tobin
Engineer Corps USN

615

Brookline
Mass
Nov. 30 1879

Dear Professor:-

I believe we have had no meeting of the Thursday Club Committee. The club begins — I see — next Thursday.

Perhaps we could arrange a meeting for 1/2 hour on Wednesday, when we meet on Tuesday at 3 P.M.

Mr. Winsor is ready with a 30-minute article — Have you other matter — beyond your "Salutatory"?

Sincerely yours
Theodore Lyman

Prof Rogers.

117 Marlboro' St
Boston Nov: '79

My dear Sir

The death of Prof. Henry has created a vacancy in the Board of Trustees of the "Tyndal fund for Amer: Scientific students;" & by the terms of Prof. Tyndal's grant it is made the duty of the Pres. of the American Nat: Academy: of Sci. to fill such vacancies whenever they occur.

Gen. Hector Tyndal of Phil. & Prof. Youmans, the remaining trustees appointed by Prof. Tyndal, are anxious that I sh: make the appointment at an early day: urging that the grant has now sufficiently accumulated to render it desirable that the trustees should begin at once to carry into practical effect Prof. Tyndal's generous purpose.

In considering my choice I have naturally my dear Prof. thought of you as among the persons

best qualified for this trust & I now ~~write~~ to offer you the position in the hope that you will find it ~~convenient~~ consistent with your convenience as well as inclinations to accept it.

You will find Prof. Tyndal's letter to Prof. Henry with the deed in full in the Smithsonian Report for 1872, page 104 to 106. Believe me yours faithfully

William B. Rogers.

Pres. Barnard.