Rules, Regulations, and General Instructions.

1857.

The attention of all persons attached to the Light-House Establishment service is particularly called to the circulars and acts of Congress, published in the latter part of these Rules and Regulations.

WASHINGTON:
WILLIAM A. HARRIS, PRINTER.
1858.
RULES, REGULATIONS, AND GENERAL INSTRUCTIONS.

I. Light-house inspectors appointed from the army or navy, in conformity to the 12th section of the act approved August 31, 1852, are charged, in their respective districts, with the general and special care of the light-houses, light-vessels, buoys, beacons, and their accessories, under the orders and directions of the Light-house Board.

They are required to give their personal attention to the making of all temporary repairs to light-houses, and to renovating and improving them, under the special directions of the Light-house Board.

II. Inspectors are required to report to the Light-house Board, as often as the exigencies of the service may seem to demand, all the special and general information in relation to the light-house service that may be necessary to render the aids to navigation efficient and reliable, and the service systematic and economical in its administration.

III. Inspectors who are provided with light-house and buoy tenders are required to visit the lights once a quarter, if it be practicable with the means provided without detriment to other and more important duties in the districts. Those who are not provided with tenders, or in cases in which they cannot be spared from attending upon the buoys and light-vessels, will report to the Light-house Board whenever it may be necessary to commence a tour of general inspection, and await special instructions upon the subject.
IV. Inspectors are authorized to travel on light-house service when public means are not provided or available, only by special authority, or direction to perform a particular service; and in cases of emergency requiring prompt action and movement to restore or render aids to navigation efficient; in which latter cases, the facts and circumstances will be reported without unnecessary delay.

V. Inspectors are required to make quarterly reports of the condition and wants of such of the light-houses, light-vessels, and other aids to navigation visited by them during the quarter, and of the state of the buoyage, stakage, &c., in their respective districts, accompanied by a list of corrections of the printed buoy lists. In case all the lights cannot (from unavoidable cause) be visited in one quarter, those omitted will be taken in their regular order during the ensuing quarter, and so continued until all the lights, &c., in the district shall have been visited, carefully examined, and reported upon.

VI. Inspectors are strictly required to see that the illuminating apparatus is kept in proper adjustment, and well cleaned and attended to at each light-station, and on board each light-vessel, and that the printed instructions and directions are faithfully conformed to by the keepers. They are required to point out and explain to the keepers the articles in the instructions which relate specially to the manner of attending upon the lamps, revolving machinery, and illuminating apparatus; the manner of keeping the account books of supplies received, expended, and remaining on hand, making quarterly and other returns, &c. Keepers should be instructed how to clean, manage, regulate, and adjust the lamps, burners, revolving machinery, and all the parts of the illuminating apparatus, and in the use of the tools and implements, and in the daily and nightly routine duties of the light-house service.

VII. Inspectors are required to make special reports of all cases coming to their knowledge in which light-keepers do not conform to the instructions and directions of the light-house service in the care and management of the lights intrusted to them.

VIII. Inspectors and superintendents are authorized and required to discharge promptly any light-keeper found in a state of intoxication at any light-house, or on board of any light-vessel, and to employ a substitute until the facts can be reported to the Secretary of the Treasury and his instructions received.

IX. In making inspections of light-houses, the following must be carefully observed:

1st. The condition of the illuminating apparatus, its cleanliness, adjustment, and state of preservation.

2d. The condition of the lamps, burners, and trimming-room supplies and implements.

3d. The condition of the revolving machinery, and weights, fly or regulator, &c.; the time of flashes and eclipses, and their duration, as compared with the time given in the list of lights; and, in case they differ, the revolutions must be regulated to conform to the prescribed time.

4th. The condition of the spare lamps, burners, fog-bell machinery, &c., &c.

5th. The cleanliness of the lantern and plate glass, inside and out.

6th. The system, order, and cleanliness in the trimming-rooms, store-rooms, oil-rooms, the steps and floors of the towers, and in the dwelling-houses.

7th. That the oil butts are properly closed by air-tight covers, the air-cocks shut, and that there is no leakage from either seams or cocks; dripping buckets hung under the cocks, and that the oil carriers and measures are clean.

8th. The condition of the grounds, enclosures, &c.

9th. The condition of spare fixtures and supplies.

10th. The state of the journals, of daily and other expenditure books, log books, shipwreck, and vessels-passing journals, returns, &c.; and all the details relating to the receipt and expenditure of supplies and fixtures and of the service in general; and, in the event of delinquency, or, on the contrary, of marked fidelity, report it to the Light-house Board.

11th. The character of the light, attention of the keeper to his duties, and his ability to perform them well, &c, &c.
12th. Renovations and improvements needed at the light station.

13th. The repairs needed to the tower and buildings.

X. Reports will be made by inspectors, of services performed and inspections made, at the close of each quarter-year, dating from the 1st of January; and special reports on both general and special subjects will be submitted as frequently as the interests of the service may render necessary.

XI. Inspectors will see that the light-keepers in their respective districts transmit to them, at the close of each quarter-year, their returns of daily expenditures of supplies for the preceding quarter, with the abstract returns to be forwarded to the Light-house Board. At the close of the fiscal year, (30th June,) in addition to the regular quarterly return and abstract, the annual abstract of fixtures, &c., must be transmitted to the inspector in duplicate, one copy to be forwarded to the Light-house Board and the other retained in the office of the inspector. Shipwreck and vessels-passing returns will be made quarterly by all keepers who are or may be provided with the necessary journals and blank forms for such returns.

XII. Inspectors will see that all returns of expenditures, abstracts, &c., are carefully examined, verified, and found to be correct, before transmitting them to the Light-house Board.

XIII. In all cases wherein keepers, and others connected with the establishment, have failed to perform their duty, it is required of the inspector to inform the Board, without delay, of the facts and circumstances, and to accompany the communication with such explanations as the offending party may be disposed to offer.

XIV. In all cases of excessive expenditure, and where the regular annual supplies furnished for a station run short, explanations must be demanded, and if they are not satisfactory to the inspector, the Board must be informed of the circumstances, and the superintendent, who is charged with the payment of the keeper's salary, must be notified to withhold a sufficient portion of it to meet the loss, until satisfactory explanations are given to, and accepted by, the Department.

XV. Light-keepers and others charged with the safe keeping and application of supplies or other property belonging to the light-house establishment, will be held strictly accountable for the same, and regular returns of the receipt and expenditure of such property will be required to be made to the inspector, and by him to the Board. No article of supply, or other public property, must be used for any purpose other than that specified in the instructions and directions of the Board.

XVI. Requisitions of keepers for supplies, except such as will interfere with the regular exhibition of the light, or in cases of emergency arising from casualties, should not be approved until the inspector or superintendent, as the case may be, is satisfied, from personal examination, of the necessity of the articles demanded.

Light-keepers must be restricted to their regular allowance of stores of all kinds; and all wasteful expenditure will be good cause for withholding the payment of their salaries until satisfactorily explained.

XVII. In every case having the appearance of fraud, or embezzlement of the public property, prompt means must be employed to arrive at the truth; and if sufficient proof of fraud or embezzlement be obtained, a detailed report must be submitted by the inspector, or, in his absence, the superintendent, to enable the Department to act in the case.

XVIII. Light-keepers' dwellings must not be converted into pilot stations, nor into boarding or lodging houses. This regulation must be enforced without exception, unless in cases excepted under the special authority from the Department.

Intemperate persons.

XIX. Persons of intemperate habits must not, under any pretence, be permitted to visit or remain on the premises of a light station; and any violation of this regulation must be met by the most summary legal correction on the part of the inspector or superintendent.

XX. Light-keepers must be required to keep their premises clean and well white-washed. All the inside...
The spare articles embraced in the list of allowances must be kept on hand, and the keepers required to examine them frequently, and keep them always clean and in perfect order for use.

Extra allowances in violation of law.

XXII. No extra allowances can be authorized to light-keepers for performing their duties of managing the lights and keeping the lanterns, apparatus, buildings, enclosures, and grounds in good order; nor for the performance of any other service whatsoever.

Neglect of duty.

XXIII. Wilful neglect of duty on the part of a keeper, in absenting himself from the light without authority, in failing to keep the apparatus in good order, or in any indifference to his trust, or in failing to give timely notice of the want of oil, wicks, or chimneys, or of any damage to the apparatus calculated to impair the usefulness of the light, must be reported without delay to the Board.

XXIV. Light-keepers will not be permitted to condemn or dispose of any article of supply, fixture, tool, implement, or other property belonging to the United States, and will be required to return or account satisfactorily for all articles worn out, or unfit for use, before new ones are supplied.

Property returns to be made.

XXV. Inspectors will make returns to the 1st of January and 1st of July, annually, of all supplies received or procured, expended or remaining on hand; of all duplicate and spare buoys and their appendages; of all spare anchors, chains, &c., for light-vessels; and of all machinery, tools, and materials, &c., for repairs of light-houses. And in addition thereto, on the 1st of July of each year, returns will be made of all office furniture, books, and miscellaneous articles not embraced in other property returns; of all illuminating apparatus, lamps, burners, &c.; and an inventory of all moveable articles, supplies, &c., belonging to each light-house and buoy tender.

Cases of damage to lights, &c. Repairs to be made promptly, &c.

XXVI. In all cases of damage to lights and other aids to navigation seriously affecting their usefulness, or which might render navigation hazardous, the inspector is required to make the necessary temporary repairs without delay; but in cases in which the public interest will not suffer by the necessary delay, authority must be asked for and obtained in advance of the commencement of the work, or the expenditure of any money. All casualties must be reported promptly, and a detailed estimate of the probable cost of repairs submitted.

XXVIII. In every case of casualty likely to affect the safety of navigation, the inspector will issue a proper notice, in the name of the Light-house Board, over his official signature, and make the report to the board; but in all other cases requiring public notice of changes in aids to navigation, or of new or improved ones, the necessary data for preparing the notices must be transmitted to the Light-house Board for examination, arrangement, and approval, and for making the publication in the usual manner by placard notices.

XXVIII. When a light-vessel, designed for a new light station, is sufficiently far advanced in construction and equipment to enable the inspector to determine at about what time it will be ready for placing at the light station, he will prepare and transmit to the Light-house Board a detailed description of the hull, spars, moorings, illuminating apparatus, and day-marks, with a general description of the station to be occupied, and report on or about what day the light may be exhibited.

XXIX. Light-vessels will be constructed strictly in conformity to the plans, models, and specifications of the Light-house Board. They will be comprised, as far as practicable, in four classes, of about the following tonnage, viz:

1st class of 230 to 270 tons.
2nd class of 150 to 180 tons.
3rd class of 100 to 130 tons.
4th class of 60 to 80 tons.

XXX. Light-vessels will be painted such color and otherwise distinguished in such manner as may be specially prescribed in each case by the Light-house Board; and no change of the prescribed color or other characteristics will be permitted. Light-vessels will in general be
The blanks in the printed forms will be correctly filled up, and the several sums required, placed in the column opposite to the head of the appropriations on account of which the money is to be drawn.

In all cases in which funds are required on account of the appropriations for supplies, repairs, buoys, or other services of an incidental character, for which written contracts have not been made and approved, the sums will be stated under the proper heads of appropriation in an explanatory letter to accompany the regular estimate for salaries, &c., in which the items of the proposed expenditure will be stated with their cost, and the authority or necessity (as the case may be) for making the expenditure specified.

XCII. Salaries of light-keepers, and others employed in the light-house establishment service, must be paid punctually at the close of each month or quarter, as the case may be, without deduction or abatement.

Receipts for salaries or wages are not to be given by keepers or others, or received by superintendents of lights, in advance of actual payments of the specified amounts; nor shall any note of hand, due-bill, or other evidence of indebtedness, be received by any light-keeper or other person in the light-house establishment service in lieu of the actual payment of the salary to which such person may be entitled; nor shall any superintendent of lights, or other disbursing officer of the light-house establishment, offer any due-bill, promissory note, or any other evidence of indebtedness to any creditor of the United States, in payment of any bill, claim, or account for labor, supplies, or materials.

Salaries of light-keepers will be paid upon separate vouchers and receipts; and all vouchers for services rendered by assistant keepers will be duly certified by the principal keeper of the light station before payments are made; but no assistant keeper shall be employed at any light-house, or paid for any service, unless he has been duly appointed, or authority previously given for his employment, by the Department.

XCIII. Light-keepers, when appointed, will receive instructions from the superintendent, inspector, or engineer, as to the time for entering upon their duties, and will be paid at the rates stipulated in their appointments from the date at which they actually enter upon their duties, and no longer.

XCIV. When light-houses are destroyed or light-vessels wrecked, the appointments of the keepers will cease, without formal notice from the Department, after the public property shall have been accounted for and delivered to the authorized agent of the United States, and for which a reasonable time will be allowed.

XCV. In case of the death or resignation of any light-keeper or assistant, it will be the duty of the superintendent of lights of the district to select, if for a light-vessel, a suitable and competent seaman, and if for a light-house, a suitable and competent person, to supply the place so vacated, and transmit, through the Light-house Board, a nomination of him to the Secretary of the Treasury; but if the interests of the public service demand it, the superintendent will be authorized to place the nominee immediately in charge of the light, subject to the approval of the Department.

XCVI. In all cases of removal, resignation, or death of keepers of light-vessels, or principal keepers of light-houses, a correct inventory must be taken of all the supplies, fixtures, and other property at the light station belonging to the United States; and in all cases of removal and resignation, receipts must be passed between the retiring and succeeding keepers, and the payment of the salary of the retiring keeper must be withheld until he accounts satisfactorily for all the public property previously in his charge.

XCVII. When new light-houses or light-vessels are sufficiently far advanced in construction to require it, superintendents of lights will be notified and instructed to nominate to the Department, through the Light-house Board, the principal, and the authorized and requisite number of assistant keepers.

XCVIII. Superintendents of lights will select keepers and assistants with, as far as possible, particular reference to their fitness for, and capacity to perform the duties required of them by the regulations.
XCIX. Men of intemperate habits, and those who are otherwise mentally or physically incapable of performing faithfully all the duties required of them in the capacity of light-keepers, must not be nominated by superintendents of lights for appointment.

C. So far as it may be done without detriment to the interest of the public service, whenever an assistant keeper is to be appointed, the principal keeper at the light station, for which the assistant is required, will be allowed to select the person so authorized to be employed, and who should be nominated by the superintendent of lights for appointment, unless there should appear to be good and sufficient reason for not doing so; in which event it will be the duty of the superintendent to report the facts in the case when he nominates another person than that named by the principal keeper; but in case there is no objection to the person named by the principal keeper, it will be the duty of the superintendent to satisfy himself that no promise of a pecuniary consideration for the recommendation has been made to the principal keeper by the proposed assistant or his friends.

CI. Assistant keepers must not be under 18 years of age; they, as well as the principal keepers, must be able to read and write, and be in every respect fully competent to attend to the duties of a light-keeper during any temporary absence of the principal. They are required to observe the orders of the principal keepers, and to be subject to them in all matters connected with the duties of the establishment; and any disobedience of the orders of the principal keepers will be held sufficient cause to recommend that the assistants be discharged.

CII. No extra compensation, pay, or emolument will be allowed to any light-keeper for attending to the lights and keeping the premises under his charge in good order, or for any other services whatever.

CIII. Superintendents of lights will receive instructions at the proper time, annually, for issuing such advertisements as may be necessary for rations and fuel for light-vehicles and tenders, and for keeping and attending to such buoys by contract as may be designated by the Light-house Board.

CIV. Advertisements will be published in such newspapers as may be designated by the Department, and in no others, but in case there are no newspapers in the district or in the vicinity of the locality at which the service for which proposals are asked, is to be rendered, authority will be given to issue them in placard or poster form.

CV. One advertisement only may be issued, calling for proposals for bids for supplying rations and fuel to all the light-vehicles, &c., in the waters adjacent to each other, without regard to the superintendencies under which the vessels are placed, should the interests of the public service require it. In that case one contract may be entered into, and the payments made by one superintendent, or separate contracts and payments by the several superintendents for the light-vehicles respectively in their districts, as may be found most expedient.

CVI. All advertisements for proposals for supplying materials, rations, fuel, or other articles to be procured, or service to be performed by contract, will state distinctly the date of the advertisement, the day of the week and month, and the hour of the day on which the sealed bids will be opened. No unsealed bid will be received or considered; no bid will be opened before the hour announced in the advertisement; and no bid will be received or considered after the hour for opening the bids shall have passed.

CVII. All bids will be opened publicly at the time and place specified in the advertisement; each one will be read aloud as it is opened, and the name of the bidder and the proposed terms noted down in the regular order in which they are reached and opened. When all the bids shall have been opened, read aloud, and duly entered, a copy of the abstract, with the bids, will be transmitted to the Light-house Board, accompanied by such explanations as may be necessary to a correct understanding of them, and a recommendation of the bid which should, in the opinion of the advertising officer, be accepted.

CVIII. All contracts for annual supplies must be drawn in conformity to the prescribed forms, and made to terminate at the close of the current or ensuing fiscal year.
No contract will be made or approved for rations, fuel, or other articles of supply, for a period extending beyond the current fiscal year, or the next ensuing one, if made before the close of the fiscal year.

CIX. Rations for the crews, and fuel for light-vessels and tenders, must be of good and approved quality, and according to the terms of the contracts; delivered or furnished, as the case may be, regularly, on or in advance of the day on which the deliveries are required by the contract to be made. In the event of any complaint of the quality of the provisions or fuel, or of the quantity delivered, it will be the duty of the superintendent to withhold payment, and of the inspector to examine into the case. Payments will not be made to the contractor until the cause of complaint is removed, and the inspector, or other authorized persons, certifies to the fact.

CX. Contractors will be required to produce the receipts of the keepers of light-vessels and others, in duplicate, for all rations and fuel delivered by them before payments will be made by the superintendent; and no bill or voucher will be passed for rations or fuel which is not accompanied by the receipt of the authorized person for their actual delivery for the use of the United States.

CXI. Keepers of light-vessels and masters of tenders will be required to attend to the receiving of all rations, fuel, and other articles intended for the vessels and crews in their charge, and receipt for the same, if of good quality and correct quantity; but in case of refusal to do so on account of quality or quantity, they must assign their reasons for their refusal in writing, for the use of the contractor and the information of the superintendent and inspector.

CXII. The numbers of persons to be employed, and the monthly rates of pay of mates, seamen, and others employed on board of light-vessels, supply-vessels, and tenders, will be regulated from time to time by the Light-house Board, according to the necessities of the service, the rates paid in the merchant service, and in the different branches of the public service.

CXIII. No increase in the rates of pay, nor in the number of persons on board of supply-vessels, light-vessels, or tenders will be allowed to be made, except by the persons to be made.

CXIV. The supply vessels will be charged with the delivery of such articles to the different lights, and in such quantities for each light, as may be deemed necessary for one year, under special instructions and directions from the Light-house Board.

CXV. A sufficient quantity of the principal articles of light-house consumption to make up any deficiencies, or to replace those damaged or lost by casualty, will be kept at the headquarters of the different inspectors, and at such other prominent points in the several districts as may be found to be necessary, which will be distributed as required, and accounted for quarterly.

CXVI. Every effort must be made to prevent the necessity for purchasing oil, wicks, chimney, and other light-house supplies in small quantities, by giving timely notice of any deficiency, so that oil may be sent from the public store, and wicks and chimney ordered from the manufacturers. Application will be made to the Light-house Board for authority to order these articles.

CXVII. Open purchases of supplies will be approved to meet cases only of absolute and pressing necessity.

All articles procured in the open market to meet cases of emergency, or otherwise, must be obtained from the manufacturer of the article, or other regular dealer in it. No open or running accounts are to be kept with merchants or others on account of the service of the light-house establishment; but when purchases are made, or work is done, the bills must be made out in due form at the time of the delivery of the articles, or of the receiving of the work; certified to by the officer making the purchase or superintending the work, and the payments made on presentation to the disbursing officer.

CXVIII. When superintendents and inspectors are called upon by light-keepers for additional supplies, they will cause the articles required to be delivered to the keeper, or sent to the light station by the most economical mode of conveyance, and take the keeper's receipts in duplicate for them according to the printed form, unless there should appear to be good reason for withholding them; in which
Unless good reason is shown for withholding the same, it must appear to the satisfaction of the inspector of the establishment that the light will not be endangered by the extinction of the lamp during the necessary interval of time which it will take to report the facts and receive instructions from the Light-house Board.

CXXIX. The authorized descriptions and quantities of supplies, implements, and equipment for maintaining the lights in an efficient state, will be designated in a list of allowances, and by special instructions from the Light-house Board for particular points. Articles not embraced in the list of allowances, or previously authorized, will not be furnished nor allowed to be used at any light-house or on board of any light-vessel.

CXXX. No permission will be given to occupy any site of a light-house, beacon, or other premises belonging to the United States for light-house purposes, be permitted by any light-keeper, superintendent, inspector, engineer, or any other person employed or engaged on light-house duty; and in case of any trespass upon the premises of any light station, or beacon, it shall be the duty of the officer, or other person of the light-house service cognizant of the fact, to make report to the Light-house Board, without unnecessary loss of time. Keepers will not be permitted to erect buildings, or make additions or alterations to buildings on light-house sites.

CXXI. Whenever any buoy is brought into port by any vessel under the plea that it was found adrift and picked up, or any boat belonging to any light-house, or light-vessel or tender, is reported to have been found adrift, and is delivered or offered to any superintendent, inspector, engineer, or keeper of light-house or vessel, a claim is made for its delivery, it will be the duty of the officer, or other person to whom the application is made, to receive the buoy or boat, examine into the case, and report all the facts to the Light-house Board for its consideration; and in no case will any superintendent, inspector, or engineer, or other disbursing officer, allow or pay salvage, or any demand of the character of salvage, for any buoy, boat, or other property belonging to the light-house establishment, which may be reported as having been picked up adrift, until duly authorized to do so. Nor shall any anchors, chains, or other articles of moorings lost from any light-vessel, or other light-house establishment vessel or boat, be searched for or removed by any person not duly authorized to search for and recover them, under a contract to be previously approved by the proper authority; and in the event of any person or persons recovering any anchors, cables, or other property without authority so to do, the superintendent, inspector, or other officer, as the case may be, shall demand it; and if it is not delivered upon a written demand, then report the facts to the Light-house Board for instructions from the Department.

CXXXII. All movable articles of every description belonging to, or procured for the light-house establishment, must be properly marked "U.S. L. H. Establishment," before applying them to the service. Bells, cast iron sinks, ballast balls for bays, and all other castings, will be marked at the time of casting them; articles of wood, such as boats and their appendages, water buckets, water casks, harness casks, breakers, &c., handles for axes, and tools of all kinds, will be branded; sails, awnings, tarpsaulins, wind-sails, bread-bags, &c., will be marked with stenciled plates; and all tools, implements, and fixtures of wrought metal, will be marked with dies. When oil is received in casks, painted in kegs, or other articles of supply in barrels, boxes, or packages, they will be marked conspicuously so as to show the contents of each parcel, and with "U.S. L. H. Establishment" on them.

CXXXIII. All oil buttts for light-houses will be constructed of the best quality, tin, soldered inside and outside, with bands soldered over the circular seams.

A cavity, formed by a double rim, to hold oil, for the lip of the lid to fit into to make the butt air-tight when filled and covered, will be provided in all oil buttts. Braces will be soldered on the bottoms of the buttts for strengthening them, and each oil butt must be carefully examined, and thoroughly tested by using boiling water, to detect leaks, before they are painted or received. Two sizes, uniform in shape and dimensions, according to the Two sizes.
plans, drawings, and specifications of the Light-house Board, of one hundred, and of fifty gallons, will be used in light-houses. The shapes and dimensions of butte designed for light-vessels may be varied to suit the different oil rooms, not exceeding the capacity of one hundred gallons each; but in other respects in strict conformity to the drawings, &c., of those for light-houses.

CXXIV. Engineer officers, detailed for light-house duty, in obedience to the ninth section of the act making appropriations for light-houses, light-vessels, buoys, &c., approved March 3, 1851, and the twelfth section of the act making appropriations for light-houses, &c., approved August 31, 1852, will be charged with the construction, reconstruction, and renovations of such light-houses, beacons, and their appendages, as may be assigned to them.

CXXV. All light-houses, beacons, and other engineering works pertaining to them, will be superintended during their construction, renovation, or while undergoing general repairs by an engineer officer, or by the engineer secretary of the Light-house Board in person, or by authorized clerks of works, under their general and special supervision and direction.

CXXVI. When a light-house, beacon, or other aid to navigation, is authorized to be erected upon land which has not been reserved from sale, or set apart from the public domain by order of the President of the United States, for light-house or other public purposes, it will be the duty of the officer charged with the superintendence of the erection of the buildings, or the inspector of the light-house district, under special instructions from the Light-house Board, to visit the locality, make a careful examination of it, ascertain the owner of the land, and for what price the required quantity for light-house purposes may be purchased; and report all the facts, with such remarks as may be necessary to a clear understanding of the subject, to the Light-house Board.

CXXVII. When authorized to make the purchase of the site for the light-house or beacon, the officer charged with the duty will cause a survey to be made under his direction, by a competent sworn surveyor, of the quantity of land authorized to be purchased; the bounds correctly set off by durable marks, and the metes and bounds laid down on a plat to a proper scale, which will be signed by the surveyor, and certified by the superintending officer. The deed will be drawn in due legal form, setting forth distinctly and explicitly the metes and bounds as described in the plat to be attached to it, conveying to the United States in fee-simple, a full, clear, unconditional, and unencumbered title. When the deed is duly executed according to law, by the party or parties making the conveyance, it will be forwarded to the light-house Board, with all the papers which may be necessary to render it a valid title to the United States.

CXXVIII. When the title to a site for a light-house, beacon, &c., shall have been reported upon favorably by the United States attorney for the district in which the land lies, and is approved by the Attorney General of the United States according to law, jurisdiction ceded to the United States by the proper authority of the State in which it lies, and the deed recorded in the proper office of record of the county or town; the consideration money agreed upon will be paid to the party or parties making the conveyance upon the presentation of proper vouchers for the same.

CXXIX. In all cases in which light-house establishment structures are authorized to be erected upon land belonging to the United States, it will be the duty of the superintending officer of the works to transmit to the Light-house Board all necessary information relating to the locality, extent of site, and metes and bounds, and await instructions before commencing the works, or expending any public money upon the site.

No public money shall be expended on any public site, or on land purchased for erecting thereon any light-house, beacon, or other light-house establishment structure, until the written opinion of the Attorney General of the United States shall be had in favor of the validity of the title, and the consent of the legislature in which the land or site may be, shall be given to the purchase.

CXXX. When the title is prepared and notice given thereof to the superintending officer of the work, he will repair to the site and make a careful examination of it
11. Directions to guide mariners in approaching or passing the light.

CXXXII. The necessary data for preparing notices to mariners of new lights, and of changes in old ones, should be transmitted to the Light-house Board as far in advance of the time proposed for exhibiting the light, or making the change in the character of the old one, as practicable, and always sufficiently in advance to give warning to navigators.

CXXXIII. All notices to mariners (except those of changes which are the result of casualty) will be issued in proper form by the Light-house Board, and sent to inspectors, superintendents, and others, for distribution.

CXXXIV. In all cases in which an inspector, superintendent, or engineer officer finds it necessary to publish a notice of damage, extinction, removal, or other casualty to any light or other aid to navigation, he will do so by order of the Light-house Board, over his official signature, under the marine head of the newspaper, and transmit one or more copies to the Light-house Board, with his report of the case. Notices of this character will be inserted but once in any paper.

CXXXV. Plans and estimates of cost in detail will be submitted to the Light-house Board for all works of construction and general repair. When approved the work will be commenced and prosecuted to completion according to the approved plans, and within the estimated cost. When plans have been approved or adopted, no deviations or departures from them will be permitted, except by special authority of the Light-house Board.

CXXXVI. When it becomes necessary, in the construction of extensive works at any point, to erect wharves or other structures, or to purchase any vessel, scow, or boat, for the economical and safe landing or preservation and protection of the materials, or for otherwise facilitating the operations connected with the works, plans, and estimates, accompanied by a detailed report setting forth the necessity, economy, and utility of the proposed expenditures, must be transmitted to the Light-house Board for its consideration and approval, before entering into any agreements, or making any expenditures of public money.
CXXXVII. Engineer officers will be held responsible for the execution of all works of construction, repair, or alterations entrusted to them, in conformity to the plans and specifications which have been approved by the Light-house Board.

CXXXVIII. Whenever it may become necessary for an inspector or engineer officer to remain at a light station on duty, he will be authorized to occupy one of the rooms of the keeper's dwelling as an office and chamber; and he may require the keeper to furnish him board and the necessary furniture, for which a reasonable compensation only should be paid. And it shall be the duty of the light-keeper, and all assistants at a light station, to afford to the engineer officer, clerk of works, or other superintending officer of construction or repair, all assistance that may be required with the government boat, and other property in his charge; and any failure of any keeper to assist, when called upon, to the best of his ability in all operations of this kind, it shall be the duty of the superintending officer to immediately report, through the proper channel, to the Light-house Board, for the action of the Secretary of the Treasury.

CXXXIX. Light-houses will be classed as follows:
1. Primary seacoast lights.
2. Secondary seacoast lights.
3. Lake coast lights.
4. Sound and bay lights.
5. Harbor and river lights.

Primary lights. Primary seacoast lights will be placed to mark the principal capes and headlands along the seacoast; will be fitted with 1st order catadioptric apparatus, and the lights elevated from 150 to 200 feet above the level of the sea.

Secondary lights. Secondary seacoast lights will be placed on secondary points or headlands along the coast, to mark the approaches to bays, sounds, &c.; will be fitted with 2d order catadioptric apparatus, and the lights elevated from 110 to 140 feet above the level of the sea.

Lake coast lights. Lake coast lights will be placed on the most prominent points or headlands, and at the entrances to the most important harbors on the great northwestern lakes; will be fitted with 2d and 3d order catadioptric apparatus, and the lights elevated from 60 to 100 feet above the level of the lake.

Sound and bay lights will be placed on the most prominent points and headlands, islands, &c., on the large bays and sounds; will be fitted with 3d and 4th order catadioptric apparatus, and the lights elevated from 40 to 100 feet above mean low water.

Harbor and river lights will be placed to mark the entrances to the harbors and the channels or obstructions in rivers; will be fitted with 4th, 5th, or 6th order catadioptric apparatus, and the lights elevated from 25 to 50 feet above the mean level of the water.

Beacon lights will be placed on piers, wharves, and to serve as ranges for, and to indicate channels, &c.; will be fitted with special lens apparatus, or with 5th or 6th order catadioptric apparatus, and the lights elevated to meet the wants of the particular locality within the range and power of the apparatus.

CXL. Lights will be distinguished in general as follows:

Primary seacoast lights.
1. Single fixed light.
2. Revolving, with flashes once in every thirty seconds.
3. Revolving, with flashes once in every minute.
4. Revolving, with flashes once in every ten minutes.
5. Revolving, with flashes once in every two minutes.
6. Revolving, with flashes once in every three minutes.
7. Revolving, with flashes once in every four minutes.
8. Fixed light, varied by flashes, (short eclipse); flash once in every thirty seconds.
9. Fixed light, varied by flashes; flash once in every minute.
10. Fixed light, varied by flashes; flash once in every two minutes.
11. Fixed light, varied by flashes; flash once in every three minutes.
12. Fixed light, varied by flashes; flash once in every four minutes.
13. Eclipse light, with prolonged flashes once in every ten seconds.
14. Eclipse light, with prolonged flashes once in every fifteen seconds.
15. Eclipse light, with prolonged flashes once in every twenty seconds.
16. Two fixed lights.
17. Two lights, one fixed and one revolving or flashing.

Secondary seacoast, &c., lights.

CXLII. Secondary seacoast lights; lake coast lights; and sound and bay lights, will be distinguished by—
1. Fixed.
2. Revolving, with different intervals of flashes and eclipses, as in the primary series.
3. Fixed lights, varied by flashes; flashes at different intervals of time, or varied by alternate red and white flashes as above.

Harbor, river, and beacon lights.

CXLIII. Harbor, river, and beacon lights, by—
1. Fixed lights in general; and
2. Green or red lights, will be used for pier-head and other small lights, where it may be found necessary to employ those distinctions.

Range lights.

CXLIV. There will be four orders of lanterns for light-houses. All lanterns of the same order will be constructed of one uniform size, and upon one uniform plan, according to the drawings and specifications of the Light-house Board.

Lanterns—1st, 2d, and 3d orders.

CXLIV. Lanterns of the 1st, 2d, and 3d orders will be used for illuminating apparatus of the corresponding orders; and the 4th order lanterns will be used indiscriminately for apparatus of the 4th, 5th, and 6th orders. All light-house towers will be planned and constructed with special reference to the dimensions of the particular order of apparatus and lantern designed for them.

Lamps and burners; uniform system of.

CXLIV. A uniform system of lamps and burners will be adopted for use in the several orders of catadioptric and other illuminating apparatus, so that each order of appa-ratus will be fitted with lamps having burners, wicks, and chimneys, of one uniform size and shape.

CXLVI. Light-house towers, keepers' dwellings, day-beacons, and other day-marks, will be distinguished by shape, arrangement, and color, according to the peculiarities of the respective localities, the kind of back grounds, and with reference to the characteristic distinctions of similar structures adjacent to them. When new towers and buildings are erected, the old ones must be removed so as to preserve the general appearance of the site as it had been seen from seaward. Buildings are not to be erected, color changed, trees cut down, nor any other change made at any light station, without the special written authority from the Light-house Board; and in case of this regulation being disregarded by any keeper or other person employed in the light-house service, it shall be the duty of the superintendent, inspector, engineer, or other officer making the discovery, to report it to the Light-house Board.

CXLVII. The order or class and characteristic distinctions of all lights, and the characteristic distinctions, by day, of all aids to navigation, will be determined by the Light-house Board; and no change in the characteristic distinction of any light, or of any tower, dwelling, beacon, or other aid to navigation, will be permitted to be made by any inspector, engineer, superintendent, or other person, without written authority to do so from the Light-house Board; and no authorized change shall be made until after due public notice shall have been given according to the prescribed mode.

CXLVIII. Authority must be asked for and obtained before engaging or employing any person who may be considered necessary for executing any duty or performing any service in connection with the construction or repair of light-house structures or their appendages, or for any other purpose connected with the light-house service, except mechanics and other day laborers, whose wages must not exceed the current rates of the locality or vicinity.

CLXIX. Officers in charge of light-house works of construction or of repair, being responsible therefor, are re-
required to inspect, or cause to be inspected by a competent and reliable person, all supplies and materials which may be required, before receiving them for any work or works under their superintendence; determine the quantity and quality of the different kinds of supplies or materials, and receive or reject them accordingly as they may be found to be of good or of bad quality, or in conformity or not to the stipulations of the contract.

Works; how to be constructed.

CL. Light-houses, beacons, and other light-house establishment works, will be constructed under approved contracts upon bids called for by public advertisement, by tenders, or by day's labor, as may be previously determined in every case. When works are to be constructed by day's labor, all materials necessary for them will be provided, as far as practicable, by contract, upon public advertisement, by tenders, or in some other authorized public manner.

Supplies or work to meet cases of emergency.

CLI. When the immediate delivery of articles of supply, &c., or the performance of services, are required by the public exigency, the articles or services required may be procured by open purchase or open contract, at the places and in the modes in which such articles are usually bought and sold, from the manufacturer, or from other first hands; or such services may be engaged as between private individuals, at the current, but at no higher rates.

Lowest bidders.

CLII. Contracts will be made with the lowest responsible bidder, and purchases from the lowest bidder who produces the proper article. But when such lowest bids are considered unreasonable, they will be rejected, and bids again invited by public notice, or the facts of the case reported to the Light-house Board and await instructions.

Advertisements for sealed bids.

CLIII. When advertisements are issued for sealed bids, the time of opening them shall be specified, and bidders have the privilege to be present at the opening.

Contrast for materials or work.

CLIV. When not otherwise directed, contracts may be entered into for the supply of materials or for doing any separate portions of a work; but each contractor must, as far as practicable, be restricted to one kind of operation, and to one kind of supply or material.

CLV. All contracts will be drawn and executed in quadruplicate, with two witnesses to the signature of each party. Duplicates will be transmitted to the Light-house Board; one copy will be retained by the officer superintending the execution of the work, and the other will be delivered, when approved, to the contractor. No contract or agreement will be binding upon the United States, or go into operation, until the contractor shall have given satisfactory guaranties for the faithful performance of all the stipulations and agreements embraced in it, nor until it shall have been duly approved by competent authority.

CLVI. No contract entered into for work, labor, materials, supplies, or for service of any kind, can be made transferable in any case, unless by permission previously obtained from the Department to make the transfer. Contracts must stipulate, in all cases, that no transfers are to be made unless by authority previously obtained from the Department, and they must be executed to the entire satisfaction of the officer superintending the works of construction or repair by the original obligor, or by some person in his name, and responsible to him; and such obligor, with his sureties, will be held to his legal responsibilities, and all payments will be made to him.

CLVII. Contractors shall give bonds, with good and sufficient security, for the true and faithful performance of their contracts. An express condition shall be inserted in all contracts that no member of Congress shall be admitted to any share or part therein, or any benefit to arise therefrom.

CLVIII. To guard against the presentation of vexatious claims for alleged extra work or materials, under contracts, special care must be taken to include in the specifications all the items and work that can be anticipated, and add a covering clause to embrace all omissions.

CLIX. Should it be found necessary, in the progress of a work, to make changes requiring new stipulations for workmanship, materials, or supplies of any kind, not provided for in the contract, the facts will be reported; and if the proposed changes are authorized, a new contract will be entered into for the additional work or materials required.
CLX. Written contracts for materials and labor will be made in all cases not specially excepted, and in conformity to the directions of the Light-house Board; but in cases of emergency, or otherwise, in which purchases are made in the open market, by special or general authority, the prices must be reasonable and satisfactory, and at the current rates of the locality, in regular dealers', manufacturers', or other first hands.

CLXI. No light-house keeper's dwelling, beacon, or other structure built, or work done under contract, shall be received or paid for, until it shall have been inspected and accepted by the superintending engineer, or other competent person, under the authority and instructions of the Light-house Board.

CLXII. No officer or other person in charge of, or engaged in, the service of the light-house establishment, will be permitted to be concerned or interested, either directly or indirectly, in any contract for labor, materials, supplies, or articles of any kind for the use thereof, or of the United States; nor to possess, either as agent or principal, any pecuniary or other interest in any patent, plan, or mode of construction of light-houses, beacons, buoys, spindles, or other aids to navigation; nor in any model, plan, or arrangement of any lamp, burner, illuminating apparatus, fixtures, or appendages thereto; nor in the supply, production, manufacture, or sale of any article of supply, material, machinery, or other article required for, or used in the light-house service.

CLXIII. No article of supply, material, fixture, or other property of any description whatsoever, belonging to the light-house establishment, in charge of an inspector, engineer, or superintending of lights, or of any other person employed in the light-house service, must be delivered to any other person, or disposed of in any way, without special authority from the Light-house Board; and in every case in which transfers are authorized to be made for the benefit of the public service, receipts will be taken in triplicate: one copy to be transmitted at the time, and the duplicate forwarded with the regular return of property expenditures, &c., to the Light-house Board.

No article of public property, of howsoever little value, shall be disposed of by gift, loan, or in any other way, for the private use or benefit of any one; nor shall any article of condemned or other public property be disposed of at private sale, unless specially authorized by the Treasury Department, through the Light-house Board.

CLXIV. Condemned supplies, materials, or other property authorized to be disposed of, shall be sold for cash at auction after due public notice, and in such market as the public interests may require. The officer making the sale will bid in and suspend the sale, when, in his opinion, better prices or those nearer the true value may be obtained. Expenses of the sale will be paid from its proceeds. The auctioneer's certificate, in detail, of the sales and the vouchers for the expenses of the sale, will be reported to the Light-house Board immediately after the sale shall have been made; the net proceeds will be credited to the appropriation to which the property belonged, and stated in the accounts of the disbursing officer at the close of the month, or first rendition of accounts thereafter.

CLXV. When public property is not accounted for, or the loss satisfactorily explained, the officer, or other person to whom it was intrusted, will be charged with its value.

CLXVI. It is to be understood, as a rule without exception, that in no manner, and under no pretense or circumstance, shall public property of any sort or of any value, howsoever small, or the use of public vessels, boats, or vehicles of any kind, or the work of public laborers, mechanics, or teams, or the use of public shops, tools, or machinery, be applied to any but the actual wants of the works in progress, or the general service; a contrary application for the benefit, advantage, comfort, convenience, or pleasure of any officer or other person connected with the light-house establishment service, is strictly prohibited, upon the pains and penalties within the power and authority of the Department.

CLXVII. Inspectors, superintendents, engineers, and others having charge of property belonging to the United States light-house establishment, are held re-
sponsible for its preservation and safe-keeping, and are required to see that all proper and necessary measures are taken and persevered in to protect it from loss, damage, waste, or premature decay.

CLXVIII. Requisitions for money shall be made with special reference to the expenditures authorized to be made within the month, and care must be taken that no more money is asked for than will be actually needed for the specified purpose or purposes. Disbursing officers will not be allowed to draw or retain in their hands larger amounts of public money than are actually required to meet the current demands of the service; and in estimating for salaries, commissions, &c., the exact amounts, after deducting available sums in hand, will be stated.

CLXIX. Disbursing officers will use the public depositories, provided by the Treasury Department, for keeping the public funds remitted to them from time to time, and will not be authorized or allowed to make deposits with private individuals, bankers, or banking institutions.

CLXX. All payments to creditors of the United States will be made in lawful money of the United States.

CLXXI. All disbursements will be made, and accounts kept and rendered, strictly in accordance with the rules, regulations, and instructions of the Treasury Department, and in conformity to the printed forms provided by the Light-house Board. All blank books, blank forms for accounts, returns, &c., on account of the light-house service, will be furnished by the Light-house Board; and no disbursing or other officer will be allowed to incur any expense, or pay for any blank books, blank forms for accounts, returns, or any other blank forms on account of the light-house service, without special written authority to do so from the Light-house Board.

CLXXII. Vouchers, under the respective heads of appropriation for supplies of light-houses, repairs, &c., of light-houses, buoy service, seamen’s wages, &c., of light-vessels and tenders, and salaries of light-keepers, will be rendered upon one general abstract and account current, according to the printed forms; and those for expenditures incurred on account of each special work will be made out and rendered on separate abstracts and accounts current.

CLXXIII. Bills of items, with explicit certificates and receipts attached, according to the printed forms, will be taken for all purchases and expenditures, except those for labor, and will show the nature, quantity, cost, and any other fact which may be necessary to a clear view of the transaction. Prices will always be stated in federal money, and the contents stated, as far as practicable, according to the United States standard of yards, feet, and inches; gallons, quarts, and pints; and pounds and ounces; for wood, cords; and for coal, tons; avoiding the use of other currency and measures which vary in different States and localities. When articles are furnished by different parties, and included in one voucher, the bills of items of the several parties must be receipted and attached to the voucher as sub-vouchers.

CLXXIV. Expenditures for daily, monthly, and quarterly services, for labor, for the hire of the crews of vessels, supply-vessels, and tenders, will be exhibited on separate pay rolls, as payments are made. The rolls will exhibit the name, occupation or rate, pay per day, month, or quarter, as the case may be, beginning and end of service, and the number of days or months paid on that roll, to which a certificate declaring that the services charged were actually performed and necessary, and stating generally the objects to which they were applied.

CLXXV. Mechanics and day laborers will be paid for Day’s labor; how the actual number of days’ work performed by them. When engaged by the month, all time lost will be deducted from the monthly rate of pay, estimating it according to the number of working days in the respective months, exclusive of Sundays.

CLXXVI. All laborers will be required to conform to the usages of the locality or neighborhood, which determine the number of working hours per day, in both winter and summer. Engineer officers and others superintending works may make such agreement with mechanics and laborers, as to the time of commencing and ending work each day, and the number of working hours which shall
Unnecessary aids should be noted, and explanations given for recommending their discontinuance.

Articles to be sold at auction.

CCIII. Empty oil or other casks, shooks, boxes, &c., will be sold, after due public notice, for cash, on the return of the supply vessels, and the proceeds credited to the United States, under the proper head of appropriation, as in case of sales of other public property, but no article of light-house supply or fixture, old brass, copper, or illuminating apparatus, boats, buoys, anchors, chains, or other articles used in the light-house service, shall be sold until regularly condemned and authority given for the sale by the Light-house Board.

Publications not to be made except specially authorized.

CCIV. Keepers of light-houses, light-vessels, buoy-tenders, and other persons employed in the light-house service, are strictly prohibited from publishing any notice or other information, or giving for publication in any newspaper or other publication, any information in relation to lights, buoys, or other aids to navigation; the movements of light-vessels or tenders, or the condition or progress of construction of works or repairs, unless specially authorized to do so by competent authority.

Deliveries of oil for the light-house service.

CCV. Oil for the light-house service must be thoroughly and carefully tested, gauged, and the casks marked before being accepted or received from the contractor, under special directions and instructions from the Light-house Board.

Tests of the oil.

No oil will be received from any contractor or other person, for use in the light-house service, which has not been tested and proved to be of the prescribed quality. It will be tested to ascertain its specific gravity, its limpidity at the prescribed temperature, and also be subjected to such other tests as may be considered necessary, such as burning in capillary or other lamps, &c., to prove the purity of the article.

The casks, containing the oil for distribution, must be made in the best manner, of the prescribed sizes, free from leaks, and in all other respects acceptable.

Oil casks.

Tests to be made in the presence of the inspecting officer and marked in the presence of the inspecting and testing officer, and, when accepted, removed immediately to the public depository, or to the supply vessel.

All tests must be made in cellars, or other cool places, and no oil contracted for, or purchased, shall be gauged, tested, accepted, or received, which has been in the sun, or exposed to its influence, or the casks of which have been left with the hongs out, and the oil exposed to the open air.

All casks or barrels of oil, which are to be tested, shall be well rolled, or the oil well stirred, before the samples for examination and test are taken from them, or the oil for test shall be taken from the bottoms of the casks or barrels. All oil for the light-house service will be received or rejected, according to the quality, as shown by actual test, without exception, and no deviation or departure from the prescribed standard will be permitted.

CCVII. All oil belonging to the light-house service will be kept in cellars, or other cool places, by itself, and the keys placed by the inspecting officer in the hands of the superintendent of lights, or other person authorized to take charge of it. The keys of the oil cellars, or other places set apart for keeping the oil belonging to the light-house establishment, will not be delivered to any other person than an authorized employed of the United States.

Water will be freely used for, and applied to, the oil casks while in store; the casks will be visited and examined carefully at least once in each week to detect loss by leakage or otherwise, and every reasonable and practicable precaution taken for its preservation and safekeeping.

CCVIII. When oil is received by an inspector, superintendent, or other authorized person, for distribution among the lights, or to supply deficiencies, &c., it shall be the duty of the officer, whose duty it is to receive and have it taken care of, to see that all the casks are full, or determine the deficiency from each barrel, that they are in good order, free from leakage, damage, or other objections, before accepting or receiving for it, and, when received, to take every precaution for its preservation.
CIX. No oil belonging to the light-house establishment shall be stored in any cellar, warehouse, or other place of deposit, with goods, wares, or merchandise belonging to private individuals; nor shall any owner of any warehouse, cellar, or other place of deposit of oil belonging to the light-house establishment, or any person, have access to said oil, unless accompanied by a responsible officer or other employé of the United States.

CCX. All casks, while in store, containing oil belonging to the light-house establishment, shall be placed on skids with bungs up and bilges free; each bung will be covered with tin tacked carefully and smoothly over it, and tape crossed on the tins, and the four ends sealed with red wax with U.S.L. H. E. stamped upon it, or some other seal which the officer in charge of the oil will be careful to keep safely.

When oil butts are provided for keeping oil in store, care must be taken to keep them tightly closed to prevent injury to the oil by exposure to air.

CCXI. Masters of supply-vessels will be careful to have all oil casks properly stowed on board of their vessels, bungs up and bilges free, and to take every precaution to prevent loss by damage or leakage; water should be sprinkled over the casks during the voyage, as often as may be necessary, to keep the casks tight.

CCXII. Seafaring men, and others interested in navigation, should be encouraged to give information of any neglect of duty on the part of those employed in the light-house establishment, as well as any other information tending to the improvement of the light-house service.

CCXIII. A rigid economy must be enforced in the management of the light-house service. No expenditure will be authorized or permitted which is not necessary to render the aids to navigation efficient.

CCXIV. Inspectors, superintendents of lights, and engineers detailed for light-house duty, and others on light-house service, will be furnished with a copy of these regulations and instructions, with copies of the blank forms, &c., for keeping accounts and making returns, who will acknowledge the receipt of the same, and transfer them to their successors in office when relieved.

By order of the Light-house Board:

W. B. SHUBRICK,
Chairman Light-house Board.

THORNTON A. JENKINS,
Commander U. S. Navy,

JOHN G. PARKE,
1st Lieut. Corps Top'1 Eng's.

Secretaries.

The foregoing rules, regulations, and instructions for the government and management of the light-house establishment, must be strictly conformed to, and rigidly enforced by the Light-house Board, and by all officers and others attached to the light-house service, under the orders of the Treasury Department.

JAMES GUTHRIE.
Esq-officio President of the Light-house Board,
Secretary of the Treasury.

TREASURY DEPARTMENT,
Washington City, D. C.