

## *Instructions for light-keepers of the United States.*

### LIGHT STATIONS WITH ONE KEEPER.

1. The lamps shall be lighted punctually every day at sunset, and extinguished at sunrise.
2. The lamps shall be kept burning bright and clear every night from sunset to sunrise; and in order that the greatest degree of light may be uniformly maintained, the wicks must be trimmed every four hours, or oftener if necessary, and clean glass chimneys fitted on; and special care must be taken to cut the tops of the wicks exactly even, to produce a flame of uniform shape, free from smoky points.
3. The keeper is held responsible for the careful watching and trimming of the light throughout the night, and is expected to be in attendance during the day, never absenting himself from duty without permission from the district inspector, except in the cases hereinafter provided for, in which cases he must furnish an efficient substitute. Any negligence will subject him to the severest displeasure of the department.
4. The keeper will be particular to note in his journal the time at which all lights- usually visible from the lantern of his tower are lighted up. He will also specify the hour of the disappearance of any of them, and note, at such times, the condition of the weather and atmosphere.
5. The plate-glass must be cleaned within and without, by night as well as by day particularly of the drift snow, sleet, and the moisture which is liable to accumulate in the interior of the lantern; and must polish and clean the reflectors, or refractors, and lamps, trim the lamps, and put the light-room in perfect order, by 10 o'clock a. m. daily, and be very particular with the order and cleanliness of the buildings, apartments, and premises.
6. Strict attention must be given to the ventilation of the lantern, taking care to keep the leeward ventilators sufficiently open to admit the requisite quantity of air to produce steady, clear, and bright lights.
7. The keepers of revolving lights are required to give their particular attention to the MOVABLE MACHINERY; to see that it is well cleaned in every part, and kept free from dust; well oiled with clockmakers' oil; uniform in its motions, without unnecessary friction of its parts; performs its revolutions regularly within the prescribed period of time; wound up at the expiration of regular intervals of time; the motive-weight rests during the day upon a support, to relieve the machinery and cord; and that the CORD is not in danger of parting from long use.

8. When the frame upon which the lamps and reflectors are placed is movable, care must be taken to place the lights in the same position every night, leaving the dark side towards that portion of the horizon which does not require to be lighted; and the reflectors and lamps must be kept firmly screwed to the frame, with the lips of the reflectors perpendicular to the horizon, except in cases where it is specially required that they should be slightly inclined.
9. The keeper is held responsible for the safety and good order of the stores, utensils, and apparatus of every description, and for everything being put to its proper use and kept in its proper place. He shall take care that none of the stores or materials are wasted, and shall observe the strictest economy and the most careful management, yet so as to maintain, in every respect, the best possible light.
10. He is on no account to leave the turning-keys attached to the cranes of the oil-cisterns after drawing oil, but shall remove and deposit them on the tray beside the oil-measures, or hang them up in some safe and convenient place.
11. He shall keep a daily journal of the quantity of oil expended, and state of the weather, embodying any events of interest or importance that may occur. These shall be written in the journal-books to be kept at each station for the purpose, at the periods of the day when they occur, as they must on no account be trusted to memory. At the end of each quarter, he shall make up and transmit to the district inspectors, under cover to the collector of the district, who is superintendent of lights, a return, which shall be an accurate copy of the journal for the preceding quarter.
12. He is also required to take notice of any shipwrecks which shall happen within the vicinity of the light-house, and to enter an account thereof, according to the prescribed form, in a book furnished to each station for this purpose; and in such account he shall state, if practicable, whether the light was seen by any one on board the shipwrecked vessel, and recognised by him, and how long it was seen before the vessel struck; A copy of this entry shall form the shipwreck return, and be forthwith forwarded to the inspector.
13. A book containing a note of the vessels passing each light-house shall be kept; and an annual schedule showing the number of vessels in each quarter, shall be sent to the district inspector.
14. The light-keeper is also held responsible for the good order and condition of everything belonging to the light-house establishment at the station under his charge, including the cleanliness of the apartments, passages, stairs, roofs, water-cisterns, wells, storerooms, workshops, privies, stables, ash-pits of the dwelling-houses, &c., &c.
15. The light-keeper shall take especial care, at all times, that neither lucifer matches, nor anything else which is easily ignited, lighted lamps, candles, or fires, be left

- anywhere in the premises, so as to endanger the public property by fire. The fire-buckets are to be kept in the most convenient place for use, and, when the weather will permit, filled with water ready, and they are on no account to be removed for household purposes.
16. The light-keeper shall, under no circumstances, use tripoli powder for cleaning the refractors, or silvered parts of the reflectors, nor any other cleaning materials than the rouge, whiting, buffskins, and cleaning-cloths, &c., furnished by direction of the Light-house Board, and for the purposes designated in the directions to light-keepers. Each package or parcel of rouge and whiting must be examined by the keeper before using it, by rubbing between his fingers, to ascertain that it is free from grit and other impurities, and, should it be found to be of bad quality, and calculated to injure the apparatus, it must not be used. The tripoli powder shall be used exclusively for cleaning the backs of the reflectors, and other brass work of the apparatus.
  17. The light-keeper shall endeavor to keep in good order and repair the dikes enclosing the light-house grounds, the landing-places and roads leading from thence to the light-house, and the drains therewith connected, together with all other things placed under his charge.
  18. When stores of any kind are to be landed, for the use of the light-house, the keeper shall attend and give his assistance. He shall satisfy himself, upon these occasions, as far as possible, of the quantity and condition of the stores received, which must be duly entered in the store-books and quarterly-return book.
  19. The light-keeper is to make a report of the quality of the stores in the return for the quarter immediately succeeding their receipt, and earlier should circumstances render it necessary, and also for the fourth quarter annually; and this report must proceed upon special trial of the several cisterns of oil, and the other stores in detail, both at the time of receiving them and after the expiration of sufficient time to test them fully.
  20. Should the supply of light-house stores at any time appear to the keeper to be getting short, so as thereby to endanger the regular appearance of the light, he shall immediately inform the district inspector, and by prudence in the management of the lights, guard against a total consumption of the supplies before others can be received.
  21. The light-keeper is prohibited from carrying on any trade or business whatever, which will take him from the premises, or in any other manner cause the neglect of his public duties.
  22. He has permission to go from home to draw his salary, and also to attend public worship on Sunday, but on no other occasion without the permission of this

- district inspector. In case of sickness he must provide a temporary keeper, and report the fact, without delay, to the district inspector or superintendent of lights.
23. The light-keeper is required to be sober and industrious, and orderly in his family. He is expected to be polite to strangers, in showing the premises at such hours as do not interfere with the proper duties of his office; it being expressly understood that strangers shall not be admitted to the light-room after sunset. Not more than three persons shall have access to the light-room at one and the same time, during the day, and no stranger visiting the light-house shall be permitted to handle any part of the machinery or apparatus. The light-keeper must not, on any pretext, admit persons in a state of intoxication into the lighthouse. He is prohibited from selling any malt or spirituous liquors, and from allowing any to be sold on the premises under his charge
  24. The light-keeper is to observe that the above general regulations are without prejudice to any more special instructions which may be made applicable to any particular light-house, or to such orders as may, from time to time, be issued by the Light-house Board.
  25. All official communications for the Light-house Board must be transmitted through the district inspector, except in cases of emergency, when they may be sent direct to one of the secretaries of the Lighthouse Board, under cover, to the honorable Secretary of the Treasury.
  26. These instructions are to be hung up in a conspicuous place in the lighthouse, and in the keeper's dwelling. The keeper is required to make himself perfectly acquainted with them.

The breach of any of the foregoing instructions will subject the offending light-keeper to the severest displeasure, of the department, and, in the absence of extenuating circumstances, to dismissal.

## *Instructions for light-keepers of the United States.*

### STATIONS WITH TWO OR MORE KEEPERS.

1. The lamps shall be lighted punctually every day at sunset, and extinguished at sunrise.
2. The lamps shall be kept burning bright and clear every night from sunset to sunrise; and in order that the greatest degree of light may be uniformly maintained, the wicks must be trimmed every four hours, or oftener if necessary, and clean glass chimneys fitted on; and special care must be taken to cut the tops of the wicks exactly even, to produce a flame of uniform shape, free from smoky points.
3. The light-keepers shall keep a regular and constant watch in the light-room throughout the night; the first watch to commence at sunset. The light-keepers are to take the watches alternately, in such manner that he who has the first watch one night shall have the second watch the next night. The length or duration of the watch shall not, in ordinary cases, exceed four hours; but during the period between the months of September and March, (both inclusive,) the first watch shall change at eight o'clock. The watches shall at all times be so arranged as to have a change at midnight.
4. The principal keeper will be particular to note on his journal the time at which all lights usually visible from the lantern of his tower are lighted up; he will also specify the hour of the disappearance of any of them, and note at such times the condition of the weather and atmosphere.
5. At stations where there is only one light-room, the daily duty shall be laid out in two departments, and the light-keepers shall change from one department to the other every Sunday night.

*First department.*—The light-keeper who has this department shall, immediately after the morning watch, cleanse and polish the reflectors or refractors; he shall also thoroughly cleanse the lamps and carefully dust the chandelier. He shall supply the burners with wicks, the lamps with oil, and shall have everything connected with the apparatus in a state of readiness for fighting up in the evening.

*Second department.*—The light-keeper who has this department shall cleanse the glass of the lantern, lamp-glasses, copper and brass work, and utensils, the walls, floors, and balcony of the light-room, and the apparatus and machinery therewith connected, together with the tower stairs, passage, doors, and windows, from the light-room to the oil-cellar.
6. For the more effectual cleansing of the glass of the lantern, and management of the lamps at the time of lighting, both light-keepers shall be upon watch

throughout the first hour of the first watch every night during the winter period, between the first day of September and the last day of March, when they shall jointly do the duty of the lightroom during that hour. These changes to and from the double watch must be noted by the keepers in the monthly returns for September and April. The light-keepers must return to the light-house on all occasions, so as to be in time to attend the double watch at fighting time during the period above specified.

7. At those stations where there are two light-rooms and two keepers, each light-keeper shall perform the entire duty of both departments in the light-room to which he may be specially assigned. But after the first hour of the first watch, the light-keeper who has charge of this watch shall perform the whole duty of trimming and attending the lights of both light-rooms till the expiration of his watch; and, in like manner, his successor in the watch shall perform the whole duty of both light-rooms during his watch.
8. At stations where there are a number of lights requiring more than two keepers, the duties shall, in the absence of special instructions, be apportioned in such manner as to equalize, as nearly as possible, the duties of all the keepers.
9. No light-keeper shall be exempted from keeping a regular watch, and performing a full-share of duty, except for sickness; in which case the fact must be entered on the journal, and reported to the district inspector without delay.
10. The plate-glass must be cleaned within and without, by night as well as by day, particularly from the drift snow and sleet, and the moisture which is liable to accumulate in the interior of the lantern.
11. The light-keeper on duty shall on no pretence whatever, during his watch, leave the light-room and balcony, except to call his relief, and at stations where there are two or more lights which require his visits during the watch.
12. The principal keepers of revolving lights are required to give their particular attention to the MOVABLE MACHINERY; to see that it is well cleaned in every part, and kept free from dust; well oiled with clockmakers' oil; uniform in its motions, without unnecessary friction of its parts; performs its revolutions regularly within the prescribed period of time; wound up at the expiration of regular intervals of time; the motive-weight rests during the day upon a support to relieve the machinery and cord; and that the CORD is not in danger of parting from long use.
13. When the frame on which the lamps and reflectors are placed is movable, care must be taken to place the lights in the same position every night, leaving the dark side towards that portion of the horizon which does not require to be lighted; and the reflectors and lamps must be kept firmly screwed to the frame, with the lips of the reflectors perpendicular to the horizon, except in cases where it is specially required that they should be slightly inclined.

14. Strict attention must be given to the ventilation of the lantern, taking care to keep the leeward ventilators sufficiently open to admit the requisite quantity of air to produce steady, clear, and bright lights.
15. The principal light-keeper is held responsible for the safety and good order of the stores, utensils, and apparatus of every description, and for everything being put to its proper use, and kept in its proper place. He shall take care that none of the stores or materials are wasted, and shall observe the strictest economy and the most careful management, yet so as to maintain, in every respect, the best possible light.
16. The principal light-keeper shall daily serve out the allowance of oil and other stores for the use of the light-room. The oil is to be measured by the assistant in sight of the principal light-keeper. The light-keepers are on no account to leave the turning-keys attached to the cranes of the oil-cisterns after drawing oil, but shall remove and deposit them on the tray beside the oil-measures, or hang them up in some safe and convenient place.
17. The light-keepers shall keep a daily journal of the quantity of oil expended, the routine of duty, and state of the weather, embodying any events of interest or importance relating to his duties that may occur. These shall be written in the journal-books to be kept at each station for the purpose, at the periods of the day when they occur, as they must on no account be trusted to memory. At the end of each quarter they shall make up and transmit to the district inspectors, under cover to the collector of the district, who is superintendent of lights, a return, which shall be an accurate copy of the journal for the preceding quarter.
18. The light-keepers are also required to take notice of any shipwrecks which shall happen within the vicinity of the light-house, and to enter an account thereof, according to the prescribed form, in a book furnished to each station for this purpose; and in such account they shall state, if practicable, whether the light was seen by any on board the shipwrecked vessel, and recognised by them, and how long it was seen before the vessel struck. A copy of this entry shall form the shipwreck return, and be forthwith forwarded to the inspector.
19. A book containing a note of the vessels passing each light-house shall be kept, and an annual schedule, showing the number of vessels in each month, shall be sent to, the district inspector.
20. The quarterly and shipwreck returns are to be written by the assistant, and the accompanying letters by the principal keeper. The whole shall be carefully compared, and the addition of the columns tested by-both light-keepers, who shall also sign the same as correct, according to the printed form ; and the principal keeper shall transmit the same to the district inspector as prescribed, without unnecessary delay.

21. The principal light-keeper is held responsible for the regularity of the watches throughout the night, for the cleanliness and good order of the reflecting or refracting apparatus, machinery, and utensils, and for the due performance of the whole duty of the light-room or lightrooms, as the case may be, whether performed by him personally or by the assistant.
22. The principal light-keeper is also held responsible for the good order and condition of everything belonging to the light-house establishment at the station under his charge, including the cleanliness of the apartments, passages, stairs, roofs, water-cisterns, wells, storerooms, workshops, privies, stables, ash-pits of the dwelling-houses, &c., &c.
23. The principal and assistant shall take especial care, at all times, that neither Lucifer matches, nor anything else which is easily ignited, lighted lamps, candles, or fires, be left anywhere in the premises, so as to endanger the public property by fire. The fire-buckets are to be kept in the most convenient place for use, and, when the weather will permit, filled with water ready for use, and they are on no account to be used for household purposes.
24. The light-keepers shall, under no circumstances, use Tripoli powder for cleaning the refractors, or silvered parts of the reflectors, nor any other cleaning materials than the rouge, whiting, buffskins, and cleaning-cloths, &c., furnished by direction of the Light-house Board, and for the purposes designated in the directions to light-keepers.
25. Each package or parcel of rouge and whiting must be examined by the keeper before using it, by rubbing between his fingers, to ascertain that it is free from grit and other impurities; and should it be found to be of bad quality, and calculated to injure the apparatus, it must not be used. The tripoli powder shall be employed exclusively for cleaning the backs of the reflectors, and other brass work of the apparatus.
26. The light-keepers shall endeavor to keep in good order and re-pair the dikes enclosing the light-house grounds, the landing-places and roads leading from thence to the light-house, and the drains therewith connected, together with all other things placed under their charge.
27. When stores of any kind are to be landed for the use of the light-house, the light-keepers shall attend and give their assistance. The principal light-keeper must, upon these occasions, satisfy himself, as far as possible, of the quantity and condition of the stores received, which must be duly entered in the store-books and quarterly-return book.
28. The light-keepers are to make a report of the quality of the stores in the quarterly return for the quarter, immediately succeeding their receipt, and earlier should



circumstances render it necessary, and also for the fourth quarter annually; and this report must proceed upon special trial of the several cisterns of oil, and the other stores in detail, both at the time of receiving, them and after the experience of sufficient time to test them fully.

29. Should the supply of light-house stores at any time appear to the principal light-keeper to be getting short, so as thereby to endanger, the regular appearance of the light, he shall immediately inform the district inspector, and, by prudent management of the lights, guard against a total consumption of the supplies before others can be received.
30. The light-keepers are prohibited from carrying on any trade or business, whatever which will take them from the premises, or in any other manner cause the neglect of their public duties.
31. The light-keepers have permission to go from home to draw their salaries, and also to attend public worship on Sunday, but on no other occasion without the permission of the district inspector. The assistant light-keepers, on all occasions of leave of absence, must consult the principal light-keeper as to the proper time for such leave, and obtain his consent; in like manner, the principal light keeper shall duly intimate his intention of going from home to the assistant light-keeper; it being expressly ordered that only one light-keeper shall be absent from the light-house at one and the same time.
32. While the principal light-keeper is absent, or is incapacitated for duty by sickness, the full charge of the light-room duty and of the premises shall devolve upon the assistant, who shall, in that case, have access to the keys of the light-room stores, and be held responsible in all respects as the principal light-keeper.
33. The light-keepers are required to be sober and industrious, and orderly in their families. They are expected to be polite to strangers, in showing the premises at such hours as do not interfere with the proper duties of their office; it being expressly understood that strangers shall not be admitted to the light-room after sunset. Not more than three persons shall have access to the light-room at one and the same time during the day, and no stranger visiting the light-house shall be permitted to handle any part of the machinery or apparatus. The light-keepers must not, on any pretext, admit persons in a state of intoxication into the light-house.
34. The principal light-keeper is prohibited from selling any malt or spirituous liquors, and from allowing any to be sold on the premises under his charge.
35. In the event of any neglect of duty on the part of any light-keeper, the other light-keeper or light-keepers at the station shall give immediate notice of the circumstance to the district inspector, the party offending being permitted to send with the notice or report any explanations he may desire to make.

36. The light-keepers are to observe that the above general regulations are without prejudice to any more special instructions which may be made applicable to any particular light-house, or to such orders as may, from time to time, be issued by the Light-house Board.
37. All official communications for the Light-house Board must be transmitted through the district inspector, except in cases of emergency, when they may be sent direct to one of the secretaries of the Lighthouse Board, under cover to the honorable Secretary of the Treasury.
38. These instructions are to be hung up in a conspicuous place in the lighthouses, and in the-dwelling of the keepers, and the keepers and assistants are required to make themselves perfectly acquainted with them.

The breach of any of the foregoing instructions will subject the offending light-keepers to the serious displeasure of the department, and in the absence of extenuating circumstances, to dismissal.