

country. Attention is invited to the interesting and instructive report of Chief Engineer J. W. King upon the dock yards of England and France, communicated to Congress at its last session.

Any future wars in which we may be involved must be of a maritime character, and unless we make in due season adequate preparations requiring no inconsiderable expenditure and time for their completion, the country will not escape mortification, and reverses, and serious disasters.

The most formidable iron-clads are those of the class of the "Passaconaway." The turrets of these vessels, which are fifteen inches in thickness, and the machinery, which is of a power to drive them eleven knots an hour, is plain and of moderate size, and yet they cannot be constructed and sent to sea in three years. So it is of all work out of that ordinary routine for which our establishments, public and private, are exclusively designed. The immediate, indispensable, and truly economical remedy for all this disadvantage is to enlarge the navy yards at Boston and New York, to complete the yard at Mare island, on the Pacific, rebuild those of Norfolk and Pensacola, and sell the present restricted grounds at Philadelphia after establishing a yard of sufficient capacity at League Island or some other proper location on the Delaware. With these extensions and improvements, and a proper establishment at some point upon the western waters, our naval position will be so strengthened as to constitute an additional safeguard against expense and perhaps war.

I have omitted any recommendation in regard to the yard at Kittery, because there are serious objections to it as a naval station, on account of its proximity to the ocean, which renders public property there insecure. Should, it however, be decided to improve the station as a public ship yard, the acquisition of Seavy's Island, as recommended by the chief of the Bureau of Yards and Docks, should be carried into effect. But the value of the island has been recently greatly enhanced and its acquisition rendered difficult in consequence of a road which passes through the yard, and a bridge connecting the island with the yard, which has been, in my opinion without due consideration, authorized by Congress. If the yard itself is not to be abandoned, the road and bridge should, in justice to the public interest, be discontinued, and Seavy's Island secured.

CONSTRUCTION OF NAVAL VESSELS.

At the beginning of the rebellion the department was without appropriate vessels for chase or blockade. Steamers of the Colorado class could enter no harbor south of Hampton Roads but Port Royal, and even those of the Hartford class could enter but few of the blockaded ports.

All the vessels constructed before the war possessed only moderate steam power, but had nearly full sailing qualities. Had the department expended its energies at the commencement in efforts to construct vessels of magnitude for war purposes, with machinery capable of making fifteen knots per hour, as has been earnestly urged, we could scarcely have completed one such vessel before the date of the fall of Wilmington. The department, without attempting impossibilities, directed its energies to accomplish what was practicable.

After procuring a supply of vessels for the blockade, by purchase and con-

struction, the next pressing want was an iron-clad or armored ship, capable of operating in our waters and going in all weathers from port to port. On a public appeal to the mechanical ingenuity of our countrymen, this want was supplied by the Monitor, a turreted vessel, which, as soon as completed, vindicated its capability, and the model thus projected has been adopted and extensively copied abroad. This class of vessels stands as the undoubted and acknowledged best defence of our shores against any naval armament at present in existence. Different types of turreted vessels—all of them improvements in some respects on the original model—have been constructed. Several of the light-draught vessels of this class, drawing but eight feet of water, completed since the adjournment of Congress, have gone from Boston and other points to Philadelphia and Hampton Roads; and one has made a voyage to Charleston, S. C., where she is stationed and performs with entire satisfaction all the duties required of her.

The double-enders, vessels originating in the peculiar necessities of this war—designed to run head or stern first—were intended for operations in the rivers, bayous, and inner waters that pervade our southern coast, where it was important to avoid the difficulty, delay, and risk of turning round in narrow channels or under fire.

When these arrangements had been made, and the vessels immediately required were well under way, so as not to be interfered with or delayed by additional work, the department commenced the construction of a superior class of steamers of size and power sufficient to insure high speed. The most forward of these vessels could not be at sea until 1866. The delays and embarrassments which have been experienced demonstrate the importance, if not absolute necessity, of enlarging our principal yards and the need of a suitable establishment for the construction of engines and heavy iron-work, such as the department for three years has steadily urged upon the consideration of Congress.

FACILITIES FOR REPAIRING NAVAL VESSELS.

The naval expenditures, which have been moderate for the work performed, are larger than they would otherwise have been, in consequence of the insufficient means and limited area of the several navy yards. Without further provision in these respects the government must always depend, in a great degree, on private establishments for much of its work. This is not objectionable, perhaps, in the construction of new hulls and engines. The experience of the last four years has taught us the value and importance of efficient and reliable private establishments to aid the government in a great emergency. The promptness and energy exhibited at some of these establishments have been wonderful and of invaluable service. Until summoned to assist the government in the great struggle that was upon us, the ability, power, and resources of these private establishments were not known nor appreciated. They generally responded with zeal and vigor to the calls of the department, and their ability will, in all future wars, give reliable strength to the country.

In constructing new vessels and machinery, the government can always have the benefit of wholesome competition at private establishments. In making its contracts for new vessels and supervising their execution, the department will be

able to protect itself, but that cannot be the case as regards the constant and often extensive repairs required on vessels which have been in service. These cannot be made by contract, and opportunities for fraud and imposition in making repairs are so great that too many yield to them. Work is often slighted and imperfectly executed; disastrous delays intervene; sometimes the job will be skillfully nursed by more extended and elaborate repairs than are necessary. The charge for materials and labor must of course be, to a considerable extent, at the discretion of those who make the repairs, and it is not surprising, perhaps, that they have frequently been exorbitant, notwithstanding all the vigilance and efforts that were exercised to protect the government.

True economy would be promoted were the government to have the necessary workshops and machinery to execute its own repairs in all cases. Almost all of the machinery and engines for the navy have been constructed at private establishments, and they must continue to be so constructed until the government shall conclude to change its policy. In the manufacture of heavy shafting and machinery for our naval vessels, which are to cruise for months, and often for years abroad, it is important that we should have the most substantial workmanship and the best materials, so that the government can safely rely on the strength and durability of its naval representatives, however remote from the country, and the officers and crews should be enabled to feel a sense of security, so far as human skill can impart it, in the floating homes which the government may provide.

A failure in the motive power of a steamer when on a cruise or far removed from establishments where the necessary repairs can be made, is a calamity against which every precaution should be taken.

LAYING UP OF THE IRON-CLADS.

The iron-clad vessels, so formidable in war, but unsuited for active service in peace, have been laid up, ready to be brought forward at any time for active duty should circumstances require. No provision having been made by Congress for a suitable dock-yard or station in fresh water, where alone iron vessels can remain and be preserved, and there being neither room nor accommodations for them at any of our present contracted yards, the department was under the necessity, until Congress shall make provision, of selecting a suitable place for the purpose. Fresh water being an indispensable requisite for the preservation of this class of vessels, and an interior location from the sea-board being almost equally indispensable for the purpose of safety, I had no hesitation in selecting League Island as possessing these advantages in an eminent degree. The board of naval and scientific gentlemen appointed in 1862, in pursuance of an act of Congress passed on the suggestion of the department, to select a site for a navy yard for iron purposes, while entertaining differing opinions as to the most eligible location for a navy yard for general objects, were united in favor of League Island "so far as iron vessels are concerned." There is probably no site to be found in the country presenting so many circumstances in its favor for laying up our iron-clad fleet. Removed from the coast, and with fresh water, League

Island combines the advantages of both security and preservation—indispensable requisites for vessels of this description.

Had Congress, three years since, authorized the removal of the navy yard from its present contracted and wholly insufficient limits in Philadelphia to League Island, as recommended by the department, other important economic advantages would have been attained. I cannot omit the opportunity of again advising the substitution of that site for the present circumscribed yard at Philadelphia, and securing this location, provided it can be obtained, for the government. It must be borne in mind that, should Congress neglect to obtain it, the government will be liable, at any moment, to be dispossessed, and compelled to remove its iron-clad fleet.

On the Mississippi river, where there is as yet no public navy yard, the station at Mound City is retained, and the iron-clads belonging to the Mississippi squadron have there their headquarters. Several vessels of this class which were built at St. Louis and attached to the West Gulf squadron, where they rendered good service, particularly in the bay of Mobile, have been laid up at Algiers, opposite New Orleans.

In this connexion, I would respectfully invite attention to the report of the commission appointed under the joint resolution of Congress in June, 1864, to "select the most suitable site for a navy yard or naval station on the Mississippi river, or upon one of its tributaries." Without intending to indicate any preference as to location, it is not to be doubted that in future wars the vessels, particularly those of iron, and the machinery and armature of our steamers, will, to some extent, be constructed in the valley of the Mississippi, where the material is so abundant. The experience of the past few years has demonstrated the capabilities of that section in producing naval vessels and machinery with rapidity.

The true policy of the government with regard to our naval force in time of peace will be to keep our iron-clads laid up in fresh water, in perfect fighting order. Our largest steamships should remain in ordinary, distributed among the principal commercial cities, while there should be a force afloat sufficient to visit annually, if necessary, every navigable port on the globe where our trade exists.

HEALTHINESS OF IRON-CLADS.

Some interesting and extraordinary facts and statistics concerning the comparative healthiness of iron-clads and wooden vessels are given in the report of the chief of the Bureau of Medicine and Surgery. The monitor class of vessels, it is well known, have but a few inches of their hulls above the water-line, and in a heavy sea are entirely submerged. It has been doubted whether, under such circumstances, it would be possible long to preserve the health of the men on board, and consequently to maintain the fighting material in a condition for effective service. It is gratifying, therefore, to know that an examination of the sick reports, covering a period of over thirty months, shows that so far from being unhealthy, there was less sickness on board the monitor vessels than on

the same number of wooden ships with an equal number of men, and in similarly exposed positions. The exemption from sickness upon the iron-clads in some instances is remarkable. There were on board the Saugus, from November 25, 1864, to April 1, 1865, a period of over four months, but four cases of sickness, (excluding accidental injuries,) and of these, two were diseases with which the patients had suffered for years. On the Montauk, for a period of one hundred and sixty-five days prior to the 29th of May, 1865, there was but one case of disease on board. Other vessels exhibit equally remarkable results, and the conclusion is reached that no wooden vessels in any squadron throughout the world can show an equal immunity from disease. The facts and tables presented are worthy of careful study.

THE NAVAL ACADEMY.

The number of midshipmen at the Naval Academy is four hundred and fifty one. The present method of selecting candidates is, in many respects, objectionable. Of the enlisted boys, those who from choice betake themselves to the seas, and are nurtured in the navy, only *three* are permitted annually to go to the academy. Few of the multitude of boys who have inclination and aptitude for the naval service can obtain the important advantage of a public education. Of those who annually present themselves under the present system, one-fifth fail to pass a satisfactory physical or mental examination. The same defects are more strikingly developed after admission. Nearly thirty-three per cent. fail the first year, and finally only about twenty-five per cent. of those who enter the academy graduate. In consequence of this state of things, the great wants of the service in the junior grades of officers have been poorly supplied, for the academy has only graduated a class averaging yearly about twenty-five members. A large portion of the money appropriated for a naval education is thus wasted chiefly in consequence of the defective system of selecting the candidates.

The board of visitors in 1864 instituted some searching inquiries to ascertain whether the requirements for entering the academy were of too rigid a character, and became fully convinced that the failures were not attributable to that cause, but that many of the boys had neither the mental nor physical qualities to fit them for the naval service.

Competitive examination in each of the congressional districts, which shall be open to all boys, under proper regulations, has been suggested as a remedy. Such examination would probably establish the mental proficiency of the candidate, which, however, might be the result of premature development. The less accomplished scholar, whose powers may not be fully developed, might nevertheless, possess a mental and physical organization better adapted to the service, which would make him a more eligible pupil and a better naval officer.

The government should have in training for its naval officers boys of good mental capacity and the best physical development. These are not obtained under the present system. I have elsewhere suggested the expediency of appointing one-half of the midshipmen from the enlisted apprentices, and the re-

mainder from congressional districts, the selection to be made from those who possess both the physical and mental qualities that fit them for the position.

In dispensing with vessels propelled wholly by sails from the list of regular men-of-war, it has become necessary to instruct the future naval officer in the principles and practice of steam-enginery. A separate department, having this object in view, has been established at the Naval Academy, under the management and direction of Chief Engineer Wm. W. Wood, assisted by eight others, who are charged with the duty of teaching the midshipmen, not only the theory of the steam-engine, but, as indicated in my last report, its actual manipulation. Sufficient experiments and progress have already been made in running the engines of the vessels attached to the academy by the midshipmen to warrant the department to persevere in its purpose of perfecting the education of the future line officers, by making them competent, in addition to their other acquirements, to manage and work the engine.

The management of a man-of-war in a gale, on a lee shore, in a narrow harbor or the splendid manœuvres of battle by sailing vessels, have hitherto been the highest and proudest duties of a thorough naval officer. The skilful disposition of the sails, which was the result of the best training of the old school, is no longer necessary, except as auxiliary to the new motive power which modern invention and science have introduced. The naval vessel is no longer dependent on the winds, nor is she at the mercy of currents; but the motive power which propels and controls her movements is subject to the mind and will of her commander, provided he is master of his profession in the future, as he has been in the past. To retain the prominence which skill and education gave him when seamanship was the most important accomplishment, the line officer must be qualified to guide and direct this new element or power. Unless he has these qualities, he will be dependent on the knowledge and skill of him who manipulates and directs the engine. To confine himself to seamanship, without the ability to manage the steam-engine, will result in his taking a secondary position, as compared with that which the accomplished naval officer formerly occupied.

For the full development and accomplishment of an object which can no longer be considered a doubtful experiment, the active co-operation of naval officers is required. When this change is effected, engineers will become the designers and constructors of engines and other marine works, and the superintendents of the mechanical employment which a navy propelled by steam has developed and may require. They will constitute, in reality, a highly educated and scientific corps, and the line officers will have added to their duties the practical management of the engines.

LOCATION OF THE NAVAL ACADEMY.

The Naval Academy, which at the beginning of the rebellion was removed to Newport, Rhode Island, was, in conformity with the act of Congress, re-transferred to Annapolis in September last. Commodore Blake, who was superintendent in 1861, continued in charge of the school so long as it remained at Newport.

On the return of the school to Annapolis, Rear-Admiral Porter was appointed superintendent, and, under his immediate supervision, the academic buildings and grounds, which had been seriously impaired while occupied for military purposes, were repaired and made ready for the reception of the midshipmen and academic staff.

Many inconveniences attended the temporary sojourn at Newport; yet when the uncertain and unsettled state of affairs is taken into consideration, the selection of that place for the purpose required was perhaps fortunate.

The academic grounds belonging to the government at Annapolis include only twenty-one acres, and are wholly insufficient for the school. Their situation in the heart of a city also subjects the youths to temptations, from which, at that period of life, it is desirable they should be removed. When the school was originally established at Fort Severn, the inconveniences and objections that now present themselves may not have been experienced; but, in the present and prospective condition of our naval power, the idea of permanently establishing a national institution of this character on these restricted grounds, where large expenditures must be made in public edifices and buildings and various improvements, cannot be seriously entertained by any who shall give the subject candid and deliberate consideration. There are over thirteen hundred acres connected with the Military Academy at West Point, and there should not be a less area for the Naval School.

In order that there may be suitable and appropriate accommodations at the academy, much is to be done and a large expenditure of money is to be made. The school was originally designed for one hundred and eighty midshipmen, with the necessary officers, professors, and instructors; but the number has been increased, until there are now authorized by law five hundred and sixty-six midshipmen, with a corresponding increase of the academic staff. There are but ninety-six rooms in the present quarters of the midshipmen, and each room is intended for two occupants. The buildings are defective in many respects, and were originally hastily and imperfectly constructed.

Commodore Blake, the late intelligent superintendent, in a carefully prepared statement, estimates the cost of the buildings and improvements which will be required at Annapolis, in order to make the institution acceptable and worthy of the country, at \$800,000. I do not question that this amount, and even a much larger sum, must be ultimately appropriated for the academy; but it cannot be considered wise or expedient to make this investment within the narrow and confined area which the government possesses at Annapolis. No amount of money which Congress may expend in buildings and improvements at that location will be satisfactory, and at no distant day a different and better site will be procured. This should not be delayed. True economy and the best interests of the government prompt an immediate selection of the best position that can be obtained before any greater expense shall have been incurred in large and costly edifices and other substantial improvements.

The importance of procuring at the beginning, and before making further outlay, the best attainable location for the academy, is worthy the serious attention of Congress.

There are several places on the shores of Chesapeake Bay where ample grounds can be procured at moderate rates—places which combine all the required advantages, and which are relieved from the serious and insurmountable difficulties which attach to the present location. The government can there possess itself of ample area, not only for permanent structures, but for such other arrangements as a national naval academy may require, which will be alike creditable and useful to the country, an honor to the government, and as enduring as the Union itself. Instead of expending more money in attempts to improve the limited grounds now occupied, I would recommend a new site, one that shall embrace, if possible, an area of at least two thousand acres, which shall not be in the immediate neighborhood of any city, with its temptations, which shall have the requisites of healthfulness, accessibility, ample water front, and space for managing vessels and fleets of boats—good anchorage, with sufficient depth of water, and such proximity to the ocean as circumstances permit, yet inside the lines of permanent defence.

The views of Congress and of the country indicate, wisely in my opinion, a preference for this latitude, where a winter climate will allow out-door exercise on board school-ships aloft, boat-sailing, manœuvring vessels, and other nautical instruction, as a proper location for a naval academy. Some necessary preliminary inquiries have already been instituted with a view of ascertaining the most eligible locations on the Chesapeake, the result of which is that there are several sites which are in all essential respects preferable to that of Annapolis, and where ample grounds can be procured. I would therefore recommend that the department be authorized to secure as soon as possible the refusal, at a reasonable price, of one or more eligible sites for a naval academy, embracing an area of not less than two thousand acres.

PAY IN NAVY YARDS.

In order to regulate the pay of workmen in the public service, always a difficult matter of adjustment, the laws of December 21, 1861, and of July 16, 1862, were enacted, directing that "the hours of labor and the rate of wages of the employes in the navy yards shall conform, as nearly as is consistent with the public interest, with those of private establishments in the immediate vicinity of the respective yards, to be determined by the commandants of the navy yards, subject to the approval and revision of the Secretary of the Navy."

The operation of the rule thus sought to be established has been satisfactory neither to the men employed nor to the government, but, on the contrary, an unceasing source of disturbance and discontent. Committees have been appointed bi-monthly at each of the yards to ascertain the rates of wages paid to similar classes of workmen in private establishments, but it has been found difficult to obtain reliable data on this subject. Some parties decline to furnish the information sought, while others give imperfect statements. When, after inquiry and investigation, a scale is adopted, having in view the interests and rights of both the government and the laborers, there is dissatisfaction, especially if in the fluctuation of the currency, or of supply and demand, there has been a reduc-

tion, and the workmen, by visiting the different private establishments, are enabled to procure from some of them certificates that higher wages are paid in some instances than the rates adopted at the yard. These certificates do not state the number or proportion of men employed at these high rates, or whether these prices are paid to all of that class in such establishment. If, on inquiry, it is ascertained that only one or two men of unusual capability receive these high prices, and that those authorized by the government are fair average rates, the explanation fails to give satisfaction, for the evidence is produced that higher wages than those on the government scale are paid in private establishments in the vicinity. The impression that there is some unfairness is engendered, complaints and strikes follow or are threatened, vigilant officers who are faithful to the government become obnoxious, and discontent prevails. I would therefore, recommend that the acts referred to be repealed.

NAVY YARD ABUSES, ETC.

The lessons of experience will have been lost as regards the labor employed in the construction of our public ships, and the teachings of this war in a great measure thrown away, should we fail to make thorough and essential changes in the organization and management of our navy yards. There has been undoubtedly a defective administration of the yards, and a want of proper responsibility pervades the whole system. Much that is wrong has its origin, without doubt, in the partisan character which has been fostered for years in those establishments where thousands of workmen are employed. Men are often pressed for positions in the navy yards, not so much for their mechanical skill, industry, and fidelity to the public service, as for supposed or anticipated partisan services in behalf of some active politician or party. Having obtained positions through such influences, the appointees themselves in the selection of workmen are governed by similar considerations. The navy yards by these means became crowded with political partisans, many of whom, I apprehend, were not skillful mechanics, to the detriment of the public interests. When elections approach, a system of assessments appears to have been applied, by which the workmen were taxed by irresponsible committee-men for alleged party purposes. Thus the supervising officers took upon themselves, or had imposed upon them, the duty of tax-gatherers for electioneering objects. I understand that the amounts thus collected in navy yards and elsewhere from government officers and workmen have been large. How the money thus collected was applied or disposed of is uncertain, for it was without accountability. This evil has been confined to no party. I have, on its being brought in an authentic form to my notice, issued, under your direction, orders to prevent these party assessments and collections in the navy yards. I have also introduced other regulations intended to check existing abuses. Whether legal prohibitions ought not to be instituted to prevent an evil so demoralizing and baneful is submitted for consideration.

A very considerable reduction of the number of master-workmen has been made, and changes have been introduced in regard to others which will, I am confident, have a salutary influence. Hereafter the several candidates for the

position of master will be examined, and the appointments made without regard to locality.

Some improvements in the system of accounts have also been introduced, and will be still further extended.

NAVY AGENTS.

The system of supplying the navy yards under what is called "open purchase" by navy agents has been discontinued, and paymasters have been ordered hereafter to make these purchases. The office of navy agent was superfluous, and had become worse than useless. The system of purchasing on a percentage, limited in the amount which the agent should receive, led to corruption and abuse, which enriched those who chose to participate in such practices, demoralized those who held the office of navy agent, tended to corrupt the subordinates in the navy yards and those who furnished articles under these purchases, discouraged and drove away honest dealers, and finally led to attempts to cover the tracks of guilt by technicalities of law, which may perhaps arrest the arm of justice, but cannot suppress the righteous judgment of an honest public opinion.

To open to the light abuses sanctioned by time, and concealed and protected by those who have profited and obtained wealth and influence through hidden mal-practices, is often a difficult as well as an ungracious task; but no officer who faithfully discharges his duty can be aware of misdemeanors or crimes of this character, and fail to expose or not strive to correct them.

The most efficient remedy for this state of things within the power of the department has been applied in the transfer of the few remaining agencies to paymasters who receive no percentage but perform their duties under the responsibility of their commissions, and may be subjected to court-martial for delinquency, or summarily removed to other duty when the public interest may require it.

MILITARY AND NAVAL ASYLUM.

The act of March 3, 1865, "to incorporate a national military and naval asylum for the relief of the totally disabled officers and men of the volunteer forces of the United States," should it ever go into effect, will be likely to operate injuriously to the naval service. It is not desirable that a military and naval asylum should be blended in one establishment. The tastes, pursuits, characteristics, and habits of the sailor and the soldier are so dissimilar that they will scarcely be made to harmonize, especially when age and infirmity are upon them. The experience and practice of all governments admonish us that the asylums or homes for these two classes should be separate and distinct. The soldier would be satisfied with a location in the interior, but the sailor would wish to spend his declining years in view of the ocean and on its shores.

It would be better that the army and navy should each have its own asylum, and it is respectfully recommended that whatever funds may remain in the treasury from fines or other causes specified in the fifth section of the act referred

to, shall be set apart, not for one asylum, but for the two branches of the service. I would recommend that all fines, forfeitures, &c., derived from naval officers or seamen may inure to the benefit of the men of the navy, irrespective of the asylum indicated in the act of last March, which is more appropriately adapted to the army.

HOME FOR SAILORS.

At a period when the hearts of the people are filled with gratitude to our sailors for the services which they have rendered, the opportunity is fitting to propose, not only further provision for the disabled of the past, but also to provide against the casualties of the future. A home for sailors exclusively, with arrangements for such of them as have families, would, if practicable, be most satisfactory, doubtless, to this deserving, loyal, and heroic class.

If Congress shall sanction the removal of the Naval Academy to some more ample and suitable location, the grounds and buildings at Annapolis could, with but slight additional expense, be converted into a home for the sailors. For health, salubrity of climate, and vicinity to the water, the location is all that could be desired for such a purpose. Whilst this measure would provide for those who may be disabled in the line of their duty, the Naval Asylum at Philadelphia will continue to receive the aged and infirm who, through a long and faithful career, have earned a title to the home which receives them.

EDUCATING SEAMEN.

The man-of-war's man of the present day has all the noble and generous qualities of the sailor of former times, and has neither deteriorated in courage, in ability, or skill in handling his guns, nor in devotion to his flag. He is not the seaman he was before the introduction of steam, but his qualities are of as high an order; and since the lash and intoxicating drinks have been expelled from the service, the morale and discipline of the man-of-war of these days is an improvement on the past.

In order that the progress of the age may enlighten the path of the sailor, it is important that a thorough system of enlisting and instructing apprentices should be put in operation. The government desires to obtain a sufficient number of the best boys in the country for apprentices, and to effect this the service must be made attractive. The assurance that a certain number of apprentices who are most capable and most deserving will be promoted annually would be found a strong incentive and inducement. Parents will be disposed to place only unmanageable boys in a service which subjects them to the life of a sailor and holds out no prospect of promotion. We shall struggle in vain to elevate or greatly ameliorate the future of the sailor, so long as the enlisted person is proscribed from advancement, and denied all hope of ever becoming a commissioned officer in the navy.

There are now by law two appointments of midshipmen at the Naval Academy from each congressional district. It is recommended that hereafter there shall be but one appointed under the present system from each district, and that the

other shall be taken from among the naval apprentices who have served two years on board of a practice-ship. The records of the two years' service will show which of the naval apprentices are most proficient, and the most deserving will have earned the privilege of being transferred to the Naval Academy, to be educated at the public expense for the higher duties of the profession.

The youths thus selected will be the most meritorious among several thousand, and a few years' experience will determine whether those thus selected are superior or inferior to those appointed from the districts under the present system.

The fact that the higher grades in the navy will be open to enlisted boys, under a system which will elevate the most worthy to be commissioned or warrant officers, will attract to the navy an abundance of the best boys who have aptitude for sea service.

This system will do away with improper favoritism which tends to demoralization, and recognizes the right of the enlisted apprentice to reach the highest honor, provided he proves himself worthy.

PROPERTY CAPTURED AND DESTROYED.

Naval men, while animated with the noblest feelings of patriotism, and ready to sacrifice their lives for their country whose integrity was imperilled, were impressed at first with the conviction that to them, professionally, the war would offer but limited opportunity, for the rebels were not a commercial people, nor addicted to maritime pursuits. No naval conflicts were anticipated, and it was supposed very few captures would be made, but the efforts of the insurgents, cut off from foreign supplies, and the attempts of unscrupulous foreign adventurers to violate the blockade, have rewarded naval vigilance and fidelity with a large number of prizes, many of them of great value. It is a gratifying circumstance that these prize captures have inured to the benefit of the naval service instead of privateers—differing in this respect from previous wars.

The number of vessels captured and sent to the courts for adjudication from May 1, 1861, to the close of the rebellion, is one thousand one hundred and fifty-one, of which there were: steamers, 210; schooners, 569; sloops, 139; ships, 13; brigs and brigantines, 29; barks, 25; yachts, 2; small boats, 139; rebel rams and iron-clads, 6; rebel gunboats, torpedo boats, and armed schooners and sloops, 10; class unknown, 7—making a total of 1,149. The numbers of vessels burned, wrecked, sunk, and otherwise destroyed during the same time were: steamers, 85; schooners, 114; sloops, 32; ships, 2; brigs, 2; barks, 4; small boats, 96; rebel rams, 5; rebel iron-clads, 4; rebel gunboats, torpedo boats, and armed schooners and sloops, 11; total, 355—making the whole number of vessels captured and destroyed 1,504. During the war of 1812 the naval vessels, of which there were 301 in service at the close, made but 291 captures. There were 517 commissioned privateers, and their captures numbered 1,428. That war was with a nation having the greatest commerce on the globe. During the recent war we have had no privateers afloat, and the rebels had but a limited commerce from which the prizes of the navy could be

made. Nearly all the captures of value were vessels built in so-called neutral ports, and fitted out and freighted in the ports of a government with which we had treaties and were on friendly terms, which had publicly pledged itself to a strict neutrality, and manifested its sincerity, so far as we were concerned, by withdrawing hospitality to our national vessels.

The gross proceeds of property captured since the blockade was instituted, and condemned as prize prior to the first of November, amounts to \$21,829,543 96; costs and expenses, \$1,616,223 96; net proceeds for distribution, \$20,501,927 69. There are a number of important cases still before the courts, which will largely increase these amounts.

The value of the 1,149 captured vessels will not be less than twenty-four million five hundred thousand dollars, and of the 355 vessels destroyed at least seven millions of dollars, making a total valuation of not less than thirty-one million five hundred thousand dollars, much of which was British property, engaged in un-neutral commerce and so justly captured and condemned.

NAVAL PENSION FUND.

The naval pension fund, at the present time, amounts to nine million of dollars, to which another million of dollars, at least, will be added on the first of January next. There was received in July last, as interest, in currency, the sum of \$292,783 59. This fund is wholly derived from the government's share in the proceeds of captured and condemned prize property; most of it was foreign capital, embarked in foreign bottoms to aid the insurgents. The income from this source will, if rightly husbanded, be ample to meet the requirements of the government for the payment of naval pensions, without any tax upon the people.

PENSIONS.

On the 1st of November, 1865, the navy pension roll was as follows:

931 invalids, with annual pensions amounting to.....	\$68,587 50
1,096 widows and orphans, annually receiving.....	179,942 00
<hr/>	<hr/>
2,027 persons, receiving a total amount of.....	248,529 50
<hr/>	<hr/>

Being an increase during the year of 418 persons, receiving pensions amounting to \$58,870 40.

I again call attention to an unjust discrimination against pensioners who have lost both hands or feet, or both eyes, in the naval service. The act of July 4th, 1864, gives increased pensions where such injuries accrue to those in the military service; but as the law is construed not to include persons in the naval service, it is believed that its operation is not what was intended by Congress. There are also several grades of naval officers for whom no provision is made, and it is suggested that the pension act should be revised with a view to include them.

INCREASE OF SALARIES.

The present compensation of our naval officers is insufficient for their support and for those necessary expenses which they are compelled to incur. Only a small portion of the life of a naval officer is spent at home with his family, and not an inconsiderable part of it is passed abroad on foreign stations, where, when in command, he is under the necessity of exercising a liberal hospitality in the interchange of those courtesies which promote friendly feelings and give character to the service and the country.

While giving their time and thoughts, and, if required, their lives to their country, these gallant men should not be harrassed with apprehensions that their families are suffering and in want, in consequence of the limited pay which is granted them by their government. The enhanced prices of the necessaries of life, which are felt by all who are dependent on salaries or a fixed income, have been painfully severe on our naval officers. Their case appeals with force to Congress, and, though always averse to unnecessary and unwise public expenditures, I have felt it my duty to present it for favorable consideration.

In this connexion, I deem it proper also to renew the suggestions made in my last annual report, that, for the reasons then stated, and which still exist, the interest of the government and the country require that a more liberal remuneration should be paid to those who are charged with the arduous and important clerical duties of this department. Their salaries at present do not correspond with those paid for similar services in private establishments, and are not sufficient to secure the right class of men for this work without entailing upon them sacrifices which they ought not to be required to make.

EXPENSES AND ESTIMATES.

The policy of the department has been to prosecute the war with energy and vigor, and to avoid at all times needless expenditure. In pursuance of this policy, as soon as the war approached its termination, prompt and efficient measures were adopted for reducing the navy and the naval expenses. The results of these efforts are of a character which will be gratifying to the country, as they are to this department.

The available resources for the fiscal year ending June 30, 1865, were.....	\$140,091,125 99
Expenditures during the same time.....	116,781,675 95
<hr/>	<hr/>
Appropriations not wanted and carried to surplus fund.....	23,309,450 04
<hr/>	<hr/>
Leaving a balance at the commencement of the present fiscal year of.....	900,459 39
<hr/>	<hr/>
The appropriations for the current year are.....	22,408,990 65
<hr/>	<hr/>
The appropriations for the current year are.....	119,882,928 75
<hr/>	<hr/>

Making the total available resources from appropriations for the fiscal year ending June 30, 1866.....

\$142,291,919 40

This is exclusive of what has been and may be derived from the sale of vessels and other property which the close of the war has enabled the department to dispose of.

The whole of this large amount will not be needed for disbursement during the year, and several of the bureaus will have balances sufficiently large to cover their expenditures for the succeeding fiscal year. The estimates for the year ending June 30, 1867, are as follows:

Pay of the navy.....	\$9,336,638 00
Bounties to discharged seamen.....	800,000 00
Equipment of vessels.....	1,000,000 00
Navy yards, pay of superintendents, &c.....	7,185,536 00
Navigation, Naval Academy, Observatory, &c.....	436,779 00
Surgeons' necessaries and hospitals.....	265,750 00
Marine corps.....	1,757,754 50
Contingent and miscellaneous.....	3,200,000 00
<hr/> Total..... <hr/>	<hr/> 23,982,457 50 <hr/>

This amount includes the sum of \$5,500,000 for the erection of barracks for the accommodation of seamen now quartered on board receiving-ships; for the erection of additional dwelling-houses for officers in the several navy yards, the purchase of land and other improvements of a permanent character.

The total expenses of this department from the 4th of March, 1861, to the 30th of June, 1865, embracing a period of four years and four months, and covering not only the ordinary expenses of the navy, but such as have arisen in the purchase, construction, and equipment of vessels and in the maintenance of the large naval force required during the war, were \$314,170,960 68—an average annual expenditure of \$72,500,990 93. It is gratifying to note that the expenses of this department since the commencement of the war have been but nine and three-tenths per cent. of the expenditures of the government during the same time.

THE BUREAUS.

During the past year two of the chiefs of the bureaus connected with this department have died: Captain Percival Drayton, chief of the Bureau of Navigation, an accomplished and patriotic officer, who has been succeeded by Captain Thornton A. Jenkins; and Surgeon William Whelan, chief of the Bureau of Medicine and Surgery, whose scientific attainments were widely known and appreciated, who has been succeeded by Surgeon P. J. Horwitz.

You are respectfully referred to the reports of the several chiefs of bureaus, herewith transmitted, for the operations in detail of their respective departments. I can only allude to some of the principal topics suggested.

The chief of the Bureau of Yards and Docks, calls attention to the necessity for increased accommodations at the navy yards. Additions to their water-fronts, docks, store houses, &c., are required to meet the demands of the service. In connexion with the Kittery yard, the purchase of Seavy's Island is recommended. At

the Charlestown yard the purchase of an adjoining wharf and water privilege is advised. In connexion with the Brooklyn yard, adjoining ground and water-front, known as the Ruggles property, is urgently needed, and an arrangement has been made under which it can be purchased. The Philadelphia yard has recently been extended, but is wholly insufficient. The Norfolk and Pensacola yards will require large appropriations to place them in a state of efficiency. Works for the increased manufacture of steam machinery are advised, and estimates are submitted for the erection in the yards of houses for the officers and barracks for the seamen now quartered on board receiving ships. A repeal of the law respecting the wages of workmen in navy yards is recommended.

The chief of the Bureau of Construction and Repair states that there are forty-one vessels intended for the permanent navy in various stages of completion, none of which have been launched. The supply of seasoned ship-timber in the navy yards is exhausted, and it is found difficult to procure some of the requisite pieces for the vessels in process of construction. It is recommended that a surplus of timber be now placed in the yards, with a view to its accumulating and being thoroughly seasoned, to meet any emergency that may hereafter arise, and also that arrangements be made at some suitable place for the construction of iron vessels.

The report of the chief of the Bureau of Equipment and Recruiting states that the fuel account of the navy for the past two years is \$11,452,155. Three coal vessels have been captured by the rebels, and twenty-one coal vessels have, during the past two years, been either lost or destroyed. In view of increasing foreign squadrons, arrangements have been made and are being extended for coal depots abroad. The ropewalk has, during the last year, manufactured 2,204 tons of hemp into cordage. The propriety of establishing a manufactory of wire rope is suggested. The number of seamen enlisted in the navy from the 4th of March, 1861, to the 1st of May, 1865, was 118,044.

The chief of the Bureau of Steam Engineering gives a detailed statement of the number, condition, and progress of the engines now under contract. A board of civilian experts, under the direction of the department, are making experiments to test the relative efficiency of vertical and horizontal tubular boilers, the effect of different modes of managing fires, different rates of combustion, and all other matters entering into the practical and best methods of generating steam. Experiments are also being made to ascertain the relative economic efficiency of steam with different measures of expansion. The accommodations in the navy yards for the repair and construction of steam machinery are insufficient for the wants of the service, and additional facilities are urgently required. The chief of the bureau recommends an increase of the pay and position of the chief engineer of the navy. It is not sufficient to induce first-class ability to remain in the service.

The report of the chief of the Bureau of Ordnance calls attention to the large quantities of ordnance and ordnance materials of all kinds which remain on hand, and, with the approval of the department, recommends a general survey at the several yards and stations, in order that the unserviceable stores may be separated from the serviceable, and disposed of as may be judged best for the