

REPORT ON IRON-CLAD WAR VESSELS.

In accordance with an order of Congress, the Secretary of the Navy appointed, on the 8th of August last, a Board of officers to investigate plans for the building of iron-clad vessels designed for naval uses. The Board consisted of Commodores J. Smith, H. Paulding, and Captain C. H. Davies. These naval authorities have made their reports, and as a whole it does not seem to be favorable to this class of war ships. It is admitted that a wooden frigate would be no match for an iron-plated ship in a close encounter, but the enormous load of iron which the latter must carry, thus requiring much more powerful engines, and involving a vastly greater cost in construction renders their adoption for sea vessels inexpedient for our navy at present. For river and harbor service, iron-clad vessels of light draught, serving for floating batteries, are held to be useful, especially for cruising in the inlets and rivers in the secession States. The report expresses a decided opinion that "no ship or floating battery, however heavily she may be plated, can cope successfully with a properly constructed fortification of masonry." We suppose this is a very safe conclusion, as a fort may be covered with much thicker iron plates than any vessel can sustain and float. But then it is also certain that an iron-clad vessel can pass many forts without receiving any injury, in situations where wooden ships would be battered to pieces.

No less than 17 plans and propositions for building iron-clad vessels were submitted to the Board, but of these three were recommended, namely, those of J. Ericsson, New York, (which has been described in our columns), Bushnell & Co., New Haven, Conn., and Merrick & Son, Philadelphia. The cost of constructing these three vessels is to be \$1,290,210. This comes within the sum (\$1,500,000) appropriated by Congress for that purpose. The Ericsson iron-clad vessel is considered a good plan for a floating battery, as it is designed to be shot and shell proof. The cost is to be \$275,000, and to be built in 100 days after contract. Tonnage, 1,255 tons, draft of water, 10 feet, speed, 9 miles per hour.

Merrick & Son's vessel is to be built of wood and iron combined. Length, 220 feet; breadth of beam, 60 feet; depth of hold, 23 feet; draft of water, 13 feet; displacement, 3,296 tons; speed, 9½ knots per hour. Price, \$780,000; time in building, 9 months. The plates are to be 4½ inches thick, 15 feet long, and 36 inches broad.

Bushnell's vessel is to be on the rail and plate principle. Length, 180 feet; breadth, —; depth of hold, 12 feet 8 inches; draft of water, 10 feet; speed 12 knots per hour; displacement not obtained. Price, \$235,250; to be built in four months.

An appropriation of \$10,000 is recommended for experimenting with iron plates, and it is asserted that 4½-inch plates are the heaviest armor a sea-going vessel can safely carry. This is a different conclusion from English naval authorities, who intend to use five and six-inch plates, we understand, in their new iron frigates. The above vessels are now being constructed, and the Navy Department has invited proposals for furnishing and fitting rolled iron plates 4½ inches in thickness, 33 inches in width, and 15½ feet in length, for clothing a number of wooden vessels. As our readers have already been informed, the Stevens Battery is referred to a special committee which is now engaged in examining it and the subject will probably soon come up in Congress.

REPORT OF THE SECRETARY OF THE TREASURY.

The most important subject in relation to the war is the condition of the Treasury. So long as we can raise money we can carry on the war, but if the funds should fail we should be reduced to the humiliation of a disgraceful peace with the rebels. The report of S. P. Chase, Secretary of the Treasury of the United States, just submitted to the first regular session of the XXXVIIIth Congress, deals with incomparably larger sums than any of its predecessors. The accounts of our treasury are made up to the 30th of June in each year, and, consequently, this report is made in the middle of the fiscal year, with the returns, however, from only one quarter as data for the estimates. These data show so much more serious interference of the war with our imports from foreign countries than was anticipated, that the Secretary is compelled to reduce

his estimates considerably below those submitted to Congress at the extra session. The estimated receipts for the year from sources other than loans are now as follows:—

From duties on imports.....	\$32,198,602 55
From lands and miscellaneous sources.....	2,354,062 89
From direct tax.....	20,000,000 00

Total revenue.....\$54,552,665 44

This is less by \$25,447,334 56 than the estimate of July. The estimated expenditures for the year are \$543,406,422 06. Nearly all of this sum is to be provided for by loans; of these all but 200,000,000 are already authorized and 197,000,000 are negotiated.

The Secretary, as usual, submits his estimates for the following year. In relation to this he says:—

ESTIMATES FOR THE FISCAL YEAR 1863.

For the fiscal year 1863, commencing on the 1st of July, 1862, and ending on the 30th June, 1863, no reliable estimates can be made. It is earnestly to be hoped, and in the judgment of the Secretary not without sufficient grounds, that the present war may be brought to an auspicious termination before mid-summer. In that event the provision of revenue by taxation which he has recommended will amply suffice for all financial exigencies without resort to additional loans; and not only so, but will enable the government to begin at once the reduction of the existing debt.

It is the part of wisdom, however, to be prepared for all eventualities, and the Secretary, therefore, submits the estimates of the various departments for the fiscal year 1863, based on the supposed continuance of the war, as follows:—

The estimated expenditures are:—	
For the civil list, including foreign inter-	
course and miscellaneous expenses other	
than on account of the public debt.....	\$23,086,971 23
For the Interior Department (Indians and	
pensions).....	4,102,962 96
For the War Department.....	360,159 986 61
For the Navy Department.....	45,164,994 18
For the public debt:—	
Redemption.....	\$2,883,364 11
Interest on debt contracted be-	
fore July 1, 1862.....	29,932,696 42
Interest on debt to be contract-	
ed after July 1, 1862.....	10,000,000 00
	42,816,330 53

Making an aggregate of estimated expendi-	
tures of.....	\$475,331,245 51
On the other hand the estimated receipts	
are:—	
From customs, lands and ordi-	
nary sources.....	\$45,800,000 00
From direct tax.....	20,000,000 00
From internal duties, includ-	
ing income tax.....	30,000,000 00

Making an aggregate of estimated receipts of 95,800,000 00

And leaving a balance to be provided for of \$379,531,245 51

The whole amount required from loans may, therefore, be thus stated:—

For the year 1862, under existing laws....	\$75,449,675 00
For the fiscal year 1862, under laws to be	
enacted.....	200,000,000 00
For the fiscal year 1863, also under laws to	
be enacted.....	379,531,245 51

Making an aggregate of.....\$654,980,920 51

The total may be stated in round numbers at \$650,000,000.

THE PUBLIC DEBT.

It only remains, in order to complete the view of the financial situation, to submit a statement of the public debt as it was on the 1st day of July, 1860 and 1861, and will be, according to the estimates now presented, at the same date in each of the years 1862 and 1863.

The statement, in brief, is as follows:—	
On the first day of July, 1860, the public	
debt was.....	\$64,769,703 08
On the first day of July, 1861, the public	
debt was.....	90,867,828 68
On the first day of July, 1862, the public	
debt will be.....	517,372,802 93
On the first day of July, 1863, the public	
debt will be.....	897,372,802 93

To facilitate the negotiation of the large loans which are to be offered, Secretary Chase proposes a scheme for remodeling the bank note circulation of the country. It is essentially the application of the New York bank system to the whole country. By the law of this State no bank going into operation is allowed to issue notes for circulation unless security for their redemption is deposited with the proper officers. The securities usually deposited are State stocks, and as these draw interest, while interest is also obtained on the notes of merchants received in exchange for the bills, the bank gets double interest on that

portion of its capital thus invested. This plan has worked well in this State, giving a safe currency and creating a large market for State stocks. In Illinois where the same system was tried, the banks generally bought the stocks of Southern States, and when the rebellion broke out these became unsaleable, rendering the redemption impossible, and utterly destroying the money in circulation. Mr. Chase proposes that the banks shall be offered United States stocks in place of State stocks, the stocks to be paid for and then deposited as security for bills which will bear the name of the United States, and will be receivable for all government dues except customs; the Secretary very wisely adhering to the safe system of conducting the operations of the Treasury in gold and silver.

Army Machine Work.

The Worcester *Spy* states that several concerns in that city are now engaged on heavy contracts for furnishing machinery for the manufacture of firearms to the U. S. Armory in Springfield, Burnside Rifle Company in Providence, Mr. Colt in Hartford, and for various other parties having contracts with the government, and for the navy yards, &c.

It says:—"The establishment of Fox & Mayo, long known as "Fox's Mills," is employing over 200 hands on a contract just completed for the manufacture, during the next four months, of 200,000 yards of sky-blue kerseys.

Mr. George Crompton's loom works have been running both night and day for the last two months making looms for weaving blankets in woolen mills. He is also building machinery for stocking guns. He employs about 100 hands.

Mr. Nathan Washburn, at his iron works, is making five tons of rifle-barrel iron per day for the Springfield armory, on a large contract. In addition to this, he has contracted to furnish 150,000 musket barrels for parties outside the government. He employs 200 hands.

Osgood Bradley, car manufacturer, has been unusually full of work for the past two months, with some 110 hands, on a contract for making 55 six-pound gun carriages, 50 forges and 105 limbers for the government. One limber goes with each carriage and each forge, to carry the tools, ammunition, &c.

Mr. L. W. Pond has just completed, at the establishment of Goddard, Rice & Co., the manufacture of a battery of twenty light rifled cannon, of his invention, called the Ellsworth gun. It is a breech-loading rifled gun, four feet long, six inches in diameter at the breech, and three and a half at the muzzle, with a one and a half inch bore, carrying a chilled iron conical ball weighing eighteen ounces, which it will throw three miles. The weight of each gun, carriage and all, is 450 lbs., and the cost \$350.—These have been sent to Washington.

The armory establishment of Allen & Whiduck employs 200 hands."

War Manufacturing Items.

A new steam engine of 70-horse power has been placed in the United States armory at Springfield, Mass., to afford additional power in the manufacture of army muskets.

The Bellknap Mills, at Laconia, N. H., are engaged in the manufacture of mittens for the army. They are made upon knitting machines, and 200 females are employed in attending them.

G. D. Cook & Co., of New Haven, Conn., have large contracts for making the carriages for batteries, also knapsacks and haversacks. They employ 450 operatives on army work.

The Colt's Firearm Company, at Hartford, Conn., employ 2,000 men in making revolvers.

S. Dean, Son & Co., of Newark, Del., have a contract for manufacturing 400,000 yards of army cloth and 200,000 blankets.

Messrs. Mills & Kershaw, of Philadelphia, are running their factory night and day, making blue kerseys at the rate of 6,000 yards weekly, for the army.

Messrs. Mansfields, of South Braintree, Mass., are making a pontoon train similar to that used in the French army. It is to consist of 64 flat-bottomed boats, to be connected together by chains in forming floating bridges.

THE California *Farmer* states that the wool clip for the present year in that State will not fall much short of four million pounds.