ONEWS

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RIO DE JANEIRO, APRIL 5711 1879

No. 7

WILLIAM MILNOR ROBERTS, CIVIL ENGINEER.

This eminent engineer, having been in vited by the Government of Brazil to take charge of the improvement of the rivers of that country, sailed on Saturday, Jan, 4, with his family, for Rio, to assume the duties of his important of ties of his important office.

His recent election to the presidency of the American Society of Civil Engineers, together with his departure for a prolonged absence, has seemed to us as offering a fitting oppor-tunity for presenting the readers of Enginee-ring News with a brief sketch of a long and ring even with a piner second or a rong and eminently successful professional career—a career which embraces the history of the public works of this country, and which has been personally connected with the inception and execution of many of the most important

W. M. Roberts, of Quaker descent, was born in the city, of Philadelphia, Felk F2, 1840. He received his education in the best private schools of that city, completing lwc mathematical terms under the eminent mathematician, Joseph Roberts. He was taught architectural drawing (in the first school estab-lished by the Franklin Institute), by John Haviland, the distinguished architect. During the first years of his engineering life, he at-tended French and mathematical schools during the winter months, paying therefor out of his moderate summer earnings. It was owing to his aptitude for figures and inves-tigation that his fathers's friend, Samuel Mifflin, then President of the Union Canal Mifflin; then President of the Union Canal Company of Pennsylvania, urged his selection of the engineering profession when in his sixteenth year. He received his first appointment from Canvass White, the celebrated canal engineer, in the spring of 1825, as a chainman, on the Union canal, in the party of which Mr. Sylvester Welch was the head. At the age of eighteen he was promoted by Mr. White to the charge of the most difficult Mix white to the catage of the most difficult division of the Lehigh canal, extending from Mauch Chunk down, sixteen miles. In 1829 his description of the Lehigh canal was published in "Hazard's Register."

We learn from Mr. Roberts that, in the We tearn from arr. Roberts that, in the carly days of engineering in the United States, assistant engineers in charge of divisions were obliged to do all the draughting for their respective divisions (at night, and during rainy days). lay out and superintend all the works survey and map the lines themselves, the luxury of office draughtsmen being very sparingly allowed for some years. Railroad en-gineering began, in a crude way, in the United States in 1826, at the Quincy Granite Quarry. It was at first a tramway, of three or four miles in length for the transportation of stone from the quarry to the water. The first regular milroad of consequence in the United States was the Mauch Chunk gravity road, nine miles in length, between the summit of Broad Top mountain and the head of the inclined plane at Mauch Chunk, for the trans portation of anthracite coal and passengers. The first passenger car in the United State was put upon the Mauch Chunk railroad in the early summer of 1827, and Mr. Rob erts was one of the passengers on its first trip down the road. So that he saw the inception of the railroad system of our country in his youth, and he has grown with its growth. In 1835-36 he planned and built the first combined railroad and common road bridge. with the railroad on top, and the wagon ro way below. It crossed the Susquehanna ri at Harrisburg. Some years afterward the su-perstructure was destroyed by fire, and a-third superstructure, which is still in use, was built upon the same piers.

In 1830, Mr. Roberts was appointed Resident Engineer in charge of the Union Railroad road and Union Canal feeder, Raitroad road and Union Canal leeder, Pennsylvania; in 1831, '32, '33, and '34, he was Senior, principal ossistant engineer on the Allegheny Portage railroad, having also charge of repairs (after the great-flood of 1832) of the Weiser District. charge of repairs (after the great flood of 1832) of the Western Division of the Pennsylvania State canal — from Johnstown to Pittsburgh, and the running and management of the inclined planes. In 1835, at the age of 26, he received his first appointment as a chief engineer, being called to fill that position on the Harrisburg & Lancaster Jilfroad, for which he was obliged to decline the same which he was obliged to decline the same office on the Upper Lehigh Navigation; du-ring the same year he accepted the chief engineership of the Cumberland Valley Rail-toad, which he held during 1836 and a part of 1837, being also employed in 1836 to make a survey and report on the Harrisbutg water-power and water-works.

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Since then he has filled the office of Chief Engineer of the following works: Ins 1837, '38, '39, '40 and '41, of the Improvement of the Monongahela river; the construction of the Pennsylvania State canal; the Eric conal, and the Improvement of the Ohio river to Lake Erie; in 1841-42, he was a contractor on the Welland canal enlargenent; in 1843-44 he was Chief Engineer for lhe Erie Canal Company; in 1845-46-47, he was Chief Engineer and Agent for Trustees of the Sandy and Beaver Canal Company of Ohio; in 1847, he declined the Chief Engineership of the Ohio & Pennsylvania mil-road; in 1848, he was appointed by name by the Legislature of Pennsylvania to make a survey to avoid if possible the Philadelphia Schuylkill Inclined Plane; in 1849, he declined the appointment of Chief Engineer for the first proposed South America railroad to take that of the Bellefontaine & Indiana railroad of Ohio, which office he held till 1851, during which year he also acted as Consulting Engineer for the Pittsburgh & Steubenville railroad; in 1852-53-54, he was Chief Engineer or the Allegheny Valley railroad; Consulting Engineer for the Atlantic & Mississippi railroad; Contractor for the whole of the Iron Mountain railrod of Missouri; and Chairman of a commission of three appointed by the Pennsylvania Legislature, to examine and report upon routes, lature, to examine and report upon routes, etc., for avoiding the old Allegheny Portage Railroad inclined planes, and was in 1853 obliged to decline the Chief Engineership of the Virginia Central railroad on account of his other engagements. In 1855-56-57, Mr. Roberts was contractor for the entire Keb kuk, Des Moines & Minnesota railroad, Consulting Engineer for the Pittsburgh & Erie and Terre Haute, Vandalia & St. Louis railroads, and Chief Engineer of the Keokuk. Mt. Pleasant & Muscatine railroad.

In December, 1857, Mr. Roberts sailed re Brazil to examine, the route of the Dom Pedro Ségundo ráifread, with a view to bidding for its construction. In 1858, as senior partner of an American firm of contractors, he returned to the United States and concluded the formal contract to build the said road with the Brazilian Minister, Senhor Carvalho de Borges; returning to Brazil in the following year, he took active charge of the construction of the above railway, and remained to the completion of the contract in 1864. During 1864-65, he devoted some, time to the examination of other railroads in Brazil, visiting also for examination of its public improvments, especially railroads, Uruguay and the Argentine Confederation, and returning in the fall of 1864 to the United States, after an absence of abou

Atter a couple of months of rest Mr. Rob erts again took the field for the surveys of the Atlantic & Great-Western railroad, which he completed in April, 1866, when appointed to make examinations and reports appointed to make examinations and reports upon the proposed "Southwest Pacific," the "North Missouri" and the "Iron Mountain" railroads of Missouri, and of the Western Maryland railroad. In the same year, he was appointed by Edwin M. Stanton, Secretary of War, U. S. Civil Engineer-in-Charge of the "Ohlo River Improvement," which office he held till 1870, when he resigned to accept the Chief Engineership of the North-railroad, In 1868 and 1866, he ern Pacific railroad. In 1868 and 1869, he filled the position of Associate Chief Engi-neer of the great St. Louis Bridge, which he resigned also in 1870 for the same reason as above given. The Chief Engineership of the Northern Pacific railroad Mr. Roberts has held to his departure for Brazil and still holds, and as late as the holds, and as late as the present season conducted in person special surveys of the Cascade Mountains, on the Pacific Coast, for the company, and up to the day of leaving, was constantly in attendance at the office of the company to assist in letting the recent con-tract for building 100 miles of road west of Bismarck, an in arranging other business of

the company prior to his leaving the country

the company programmer for his long absence. While acting as Chief Engineek for the Northern Pacific Railroad Company, Mr. Roberts in 1873, examined and reported the Marquette & Mackinaw railroad in the Marquette & Marquette & Marquette & Mackinaw railroad in the Marquette & Marquet Roberts in 1873, examined and reported upon the Marquette & Macklinaw milroad in the peninsula of Michigan, and also upon the Minneapolis & St. Louis railroad; in 1874, he made a report upon the New Pittsburgh water-works, and in 1875, he was one of a commission to examine and report upon the Philadelphia water supply. In 1874, also, he was appointed by the President of the United States one of the Commission of Military and Civil Engineers to examine and report upon the best plan for improving the report upon the best plan for improving the mouth of the Mississipin River, and for this purpose he visited Europe with the commission, and after visiting the delta of the Mississippi on his geturn, reported to the Secretary of War. In 1876, as Vice-Posident of the American Society of Civil Engineers, he devoted a considerable portion of his time in the interests of the profession at the Centen-nial Exhibition at Philadelphia; in 1877, he located the Nictaux & Atlantic milroad in Nova Scotia, and upon his return from Oregon, only a few months age, he accepted the invitation of the Brazilian Government to take charge of the water ways of the Empire, at a salary of \$20,000 per year, for three years, upon the duties of which office he has already entered. At the recept annual meeting of the American Society of Civil Engiing of the American Society of CAvil Engineers, in this city, Mr. Robetts was elected President, and in leaving the wired States for a temporary (as we trust) absolice at a foreign country, he carries with him, the highest hopors that are obtainable in his profession in this country. Mr. Roberts has frow, after a very busy life, attained almost to the expense are altituded to many us as his associaage allotted to man, yet, as his associates and friends, who meet him in the daily routine of business, or as the ruling spirit of society meetings and excursions can abundantly testify, his step is still of the firmest, and all his laculities the clearest, so that, unless some unforeseen accident befall him. Mr. Roberts has still the promise of many years of active labor in the highest fields of

his profession before him.

We have thus briefly sketched, from such information as we could obtain, the professional life of one of America's most talented civil engineers. We have no doubt, that in those busy years, a multitude of other engage ments have been filled-how carefully, ably and thoroughly, all the important trusts committed to his care have been discharged, is attested by the latest honors that have been added to his well-earned laurels.

We join with the thousands of others of the admirers of the successful engineer in wishing him and his family a safe voyage, and a successful completion of the important enterprise which has been committed to his

THE BANCO NACIONAL FAILURE

At a meeting held on the 1st instant for further inquiry into the causes that led to the bankruptcy of the "Banco Nacional" for the purpose of arriving at a final decision as to whether the failure resulted merely from natural causes, whether it should be attributed to fra or culpable negligence on the part of the managers and directors, Counselor Araripe, after a few introductory remarks proceeded to lay before the meeting the following statement of the bank's operations which led to its bankruptcy being declared on June 7th, 1878.

In order to place the state of the legal rocess clearly before the meeting His Excel-ency indicated the causes under the fol-

lowing heads:

18t The phases of the case.

2nd. The facts which require qualifica-

3rd, Whether the managers were culpably

4th. Who were the managers of the bank. 4th. Who were the managers of the bank. Regarding the phases of the case His Excellency said the failure of the bank was occasioned by the petition of one of the creditors on June 6th, 1878, and by another on the following day, leading to the declar

The declaration in question bears the signaures of the directors or managers, Them-stocles Petrocochino, and João Ferreira le Abreu; — the president of the beard, Counsellor Cansansão de Sinimbá, having retired from the directory on January 5th, 1878.

His Excellency called to mind that on May 13, 1876, the managers of the bank petitioned and obtained a moratoria (extension of time for closing up affairs), the terms of which not having been fulfilled gave rise to the declaration of bankruptcy above mentioned—the petition being signed by Joao Lins Vicira Cansançao de Sinimbú, Themistocles Petrocochino, and Manoel Teixeira do Valle.

As to what facts led to the qualification of bankruptcy His Excellency said,
(A) that the bank on March 7th., 1875,
(occasion of the moratoria) was possessor of bonds valued at 1,061,440\$000, and held as securities against advances, government bonds and shares of various companies amounting to Rs. 10, 153,000\$000 as shown in the statement of auditors and in the balance sheet attached to the moratoria.

At the time of the declaration bankruptcy June 7th, 1878, the bank possessed in shares of other bank's and companies Rs. 1,260,360000 and held as security for advances about 3,00,000000000 also in shares of various banks and companies as shown in their balance sheet.

From this is manifest the large transac-tions effected by the bank on the basis of public and private securities amounting to thousands of contos of reis while its realdousands of contos of reis while its real-ized capital was only Rs. 2,996,100\$200, as was seen from the balance sheets, al-though the nominal capital was 10,000, 000\$000, of which only the sum above aboe mentioned had been paid in.

From the declarations made at different periods by the directors it will be observed periods by the directors it will be observed that the shares of the various companies dealt in and held by the bank suffered a deprecia-tion of more than 50 per cent. of their nominal value, the greater part being, at the same time, unsalable and valueless as realizable ecurity. From this resulted such losses and nents to the bank as precluded embarn them from meeting their obligations

The bank having entered into liquidation during the *moratoria* suffered a loss of more than Rs. 36,000\$000 on realizing the bonds held by them, and on realizing the securities (shares of various companies) deposited as guarantees by six of the bank's debtors, the bank suffered a further loss of Rs. 1,208,963\$ as shown by their balance sheets, statements of profit and loss, and by various documents of the case. These heavy losses, of themselves absorbed nearly half the realized capital of the bank, without taking into consideration the further losses due to the depreciation of shares belonging to the bank or held a

The fiscal auditors expressly state in their report that the "Banco Nacional" lent large sums to private parties, on stock securities, and, deposits having ceased, being obliged to realize on those securities, was forced to suspend payments and ask for the moratoria.

From this it will be seen that the same causes occasioned the petitions for moratoria, and for bankruptcy, id est losses arising from negotiations in bank and other stocks

(B) The indebtedness of the bank—more than 21,000,000\$ according to the last balance-sheet Dec. 31st., 1878, was more than the double of the capital whether realized (2,996, 100\$) or nominal (10,000,000\$).

(C) The bank after entering into liquidation received from some of its creditors the bank's own bills, or acceptances, constituting thus a class of special creditors who were thus paid in full (as shewn by the va-rious accounts closed by this method) while the remaining creditors of the bank, who were not at the same time debtors to the bank or who did not buy the bank's acceptances (already greatly depreciated) with which to meet their liabilities to the bank will receive only the amount determined by the final liquidation. Thus a debtor to the bank in one account being at the same time on the following day, leading to a creditor in another account, could pay the first same month. In its own acceptances purchased in the mar-

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ket at less than half that a mount - while another creditor of the bank of Rs. 10,000\$000 who had not succeeded in making the same operation, would finally receive at most one or two contos of reis from the liquidation, without taking into consideration loss of interest, etc.

For the further enlightenment of the Tribunal His Excellency laid before them the following list of the so-called special creditors, or credores-develores:

Luiz A. Tassara de Padua.

	Antonio Ferreira Butler	35.8028000
	Maximiano Fogreira Borges	44.600-000
	Coelho & Irmãos.	47,1518000
	José Gonçalves Pereira	113,3018000
	José Xavier Ferreira.	2,6468000
1	Lara Tupper	21.5858000
	Jeronymo Moreira	10,8815000
	F. H. Tross	30.1648000
	Bernardo Caimary	22,3778000
	C. D'Ordan	12,0698000
	Theodoro L. Ferreira	0.3008000
	Ataliba Gomensoro	2,0235000
	Santos Bastos & Irmãos	20.3615000
i	Eduardo Tavares	30.3425000
ĺ	Joaquim Rocha Leão,	57,7538000
ı	Antonio José da Silva	7,7395000
ı	Balthazar de Carvallio,	10,4028000
ı	Eduardo Braga	11,0705000
ı	Joaquim Pereira de Faria	50, 2035000
į	Joaquim Ribeiro Gomes	5,6368000
I	Domingos Moitinho	121,635\$000
	Vianna Drummond	58,0918000
İ	Temistocles Petrocochino	108,257\$000
١	Miranda Azevedo & C	6,4008000
١	Dr. Souza Carvalho	42,0905000
	Calogeras & Irmão	52,080,000
	Antonio Joaquim Coellio	1,4008000
١	Comp. F. C. de Porto-Alegre	92,9895000
l	Silva Caminha	8,6978000
ı	Gustavo Joppert	4,5588000
١	Mello Barreto:	12,494\$000
ı	Companhia Architectonica	23,3808000
١	Companhia de S. Paulo	33,3175000
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ı		Carlotte Contract Con

1,244,000\$, to the prejudice of those credwho were not at the same time delitors.

(D) In the various balance, sheets that served as a base for the moratoria, and afterwards in those presented in the course of the liquidation, the securities held by the bank were entered at their nominal value

In the balance sheets of the liquidation the bank presents available assets to the amount of 18,915,075 and investments to an equal amount, but in reality it is seen that 7,003.900s were lacking to compl capital stock.

It is also seen that, calculating the depreciation of the securities held by the bank a 50 % only, there was a depreciation of more than 2,000,0008 from the **nom**inal value which added to the 7,003,000\$ gives a depreciation of more than 9,000,000\$ at the time of failure so that, instead of more than 18.000,000\$ of available assets, there was in reality less than 9.000,000\$ not including bad debts and the depreciation of other values. Thus the balances of the bank presented the institution as solvent when in real-ity it was not, and depositors confiding in the values given in the balance sheets continued

The following are the quotations of various stocks on the 30th, of September, 1878:

Companhia Brazileira de Nave-		
gação	1955000	
Companhia Paulista (not quoted)	5	
Transportes Maritimos (not		
quoted)	8	
Carris F. Nitherohyense	415000	
Carris F. Montevideo (not		
quoted)	~	
Carris F. Porto-Alegrense	\$ 5 · * ·	
Carris F. S. Paulo (not quoted)		
Carris F. do Maranhão	20,500	
Carris F. de Pernambuco (not		
quoted)		
Companhia Macahé e Campos.	455.00	
Brazil Industrial	50,500	
Companhia Architectonica (not		
quoted)		
Docas de Pedro II	3 -	
Banco do Brazil	2025000	
Banco Predial	103500	
Banque Brésilienne - Française		

plain the nature of criminal responsibility as bearing more directly upon the subject under discussion, id ist that of the responsibility of managers or directors of joint stock com-panies, and then observed that the board of di-rectors of the "Banco Nacional" commenced their operations on February 15th., 1872, the directors at that time being Visconde de Prados, Themistoeles Petrocochino and Manoel Teixeira do Valle. On October 13th. 1874, the Visconde de Prados retired from the board. Counselor Cansansão de Si-nimbú was elected to the presidency of the board on February 18th., 1876, on the retiring of Manoel Teixeira do Valle. João Teixeira de Abreu was elected to the vacan Also that Agostinho seat at the board. Also that Agostinho Maria Correa de Sá, having been elected on March 10th., 1879, in substitution of Themistocles Petrocochino, tendered his resignation on the 14th of June following without however having actually taken part in the management of the bank, upon which Themistocles Petrocochino was re-elected direct tor. Also that on January 5th., 1878, Counscior Cansansão de Sinimbú retired from the presidency of the board, the management of the bank devolving from that date upon the two remaining directors, Themistocles Petrocockino and Joao Teixeira de Abreu. His Excellency in concluding his report and explination of the legal process to this point, submitted them to the appreciation of

BANCO NACIONAL FAILURE.

Comments of the Press.

In relation to the case of the " Banco Nacional and of the part which Counsel or Simibu too, in its administration, the leading journals of Rio de Janeiro, on the 3rd inst., commended as follows.

The Cruzero (adependent) says

Day before y torday judgment was ren-dered in the trib nal of the Relação which

a certain ext at startled public opinion. In it was invert d the name of a minister of state. The cas had been a long time unssion; political passions had em-

it we must respect the secret of justice. Nothing, however, impedes our writing a few words on the occurrence in order to rec tify, as far as may be possible, impressions that are liable to be unjust.

This propensity for scandal which seems to rejoice even with the difficulties that a fortuitous event may produce in public affairs is sickening and much to be lamented.

The minister involved in the case took part for some time in the administration o a banking establishment. Very possibly, during his administration, irregularities occurred. The confidence that we owe to the tribunals of the country oblige us to admithat the documents present the bases necessary for the institution of a criminal process. for it must not be forgotten that we are treating here of a simple indictment.

No one can, however, for a moment sup

pose that the character, the probity of the worthy President of the Council can be ever slightly touched by such a proceeding.

An error in the administration of a bank ing establishment may occur; transactions may be effected that escape the solicitude o a man but little accustomed, if not entirely a stranger, to such business; the idea of a crime, of a speculation is absolutely inadmissable before the tribunal of public opinion. Sr. Sinimbú has fulfilled a long ca reer without his name having ever become a sport even amongst his enemies.

Foreign to political partialities it is our duty to bear this disinterested and impartial testi-mony of one who merited the confidance of the chief of the state and of the country and who is now at the head of the executive

Still farther, the national pride and credit

require this.

Despicable indeed must be the character that would attenue to obscure the reputation of men who represent the most distinguished part in the country; and once that such a precedent is established of putting the chie of the cabinet at the mercy of an ordinary criminal proceeding, with the general tendency to abuse everything, with the desire so generally observed in certain persons to make everything appear mean, in a short

His Excellency then proceeded to extime government will be no longer possible and men can no longer be found to accept positions which from their very nature attract such painful aggressions.

France has just given a grand example of political commences and example of political commences.

of political common sense in not instituting

roccedings against the cabinet of May 16.

It is taue that the case in question was It is taue that the case in question wa the greatest of political crimes, but for the very reason its importance was much greater. France ran the greatest risk of falling again France ran the greatest risk of animy again into the regime of a reactionary government which, retarding the realization of her aspirations, would most probably have plunged her again into revolution.

France comprehended that she needed above all things to proceed in her internal re-forms, in the plan of her immense material improvements, and that she should not allow self to be turned aside from the grand work of national restoration to satisfy passions or even to punish crimes which, however grave they may have been are always small indeed in comparison with the mos important interests of a great people.

It is not with miserable chicanery, with individual retaliations originating many times in disappointed, petty ambitions, that we shall succeed in reorganizing this country, of whose bad condition we all complain.

He who is sincere in the desire of pro moting the public good instead of pu embarrassments in the way of the admini ration should remove them.

The more sincerely we abstain from creating embarrassments or discrediting the ac ministration, the more strictly we may call it to account for its use of the power entrust-

The Gasetta de Noticias (independent) says, in effect :

We have no express law determining the responsibility of the managers of joint stock companies. They should, therefore, be con-sidered as agents of the stock holders who from year to year assume the responsibility of their acts, in approving their accounts and in, almost always, praising their services.

The fiscal committees of such com in general composed of intime.

the managers, have " to obver up the induced

in such a failure as that of the "Banco Nacional," it should extend to the fiscal com-mittee that examined and the shareholders

that approved the acts of the managers.

The failure of a joint stock company car not be legally considered fraudulent unless the shareholders as well as their agents are to be held responsible.

The "Reporter" (independent) after briefly obtaining the history of the case says:

" The memorial contains the most convincing proofs of the moral degredation to which the most sacred things of the country have descended. '

"The name of the President of the Council and Minister of Agriculture and of Foreign Affairs did not come out untouched as was o auch to be desired for the good of our credit.

"During his administration of the "Banco Nacional" facts occurred which while they do not render certain the intentions with which he sanctioned them, show that His Excellency was not sufficiently careful in lending his name without examination to illicit acts.

'The honor of this country is worth mor than a caprice and the noble president of the council bowing to the facts, should to-day render his country the most signal service i can require at his hands, retiring with hi collegues from positions in which the country considers them to be without prestige.

The Fornal do Commercio has nothing to say editorially on the subject

The customs policy of Germany, as out lined by the En by the Emperor William in a recent is as follows: "Our commerce has a right to claim that protection which legis lation regarding customs taxes can afford, and which is afforded, perhaps beyond what is necessary, in countries with which we trade. My duty is to preserve a German market for articles of home production. We should revert to the well-tried principles which we, in our commercial policy since 1865, have abandoned."

THE RIO NEWS,

TERMS

RIO DE JANEIRO, April 5th., 1879.

THE RIO NEWS will be furnished to the sub "The British an acceeds, until the hall have expired.

THERE is a time-honored custom among newspaper makers and newspapers readers which requires that the opening and closing of a journal's life, its purposes and results, shall be accorded the honors of a public reception. THE RIO NEWS seeks no such nonor. It comes into existince to determine to a recognized necessity; when that necessity no longer exists, should that time ever come, it will discontinue publication. In the meantime, its patrons may feel assured that its work will be done impersonally and conscientiously on the part of its conductors. and with all the thoroughness which its means and surroundings will admit.

RECENT news from Paragive discouraging reports of the estanha crop of this year on the Curua and Brombetas. There is a marked failure in the harvest. The cacáo crop, how-ever, is reported to be very bountiful.

the Promated, Relaylo by Councelor Am-ripe, and the comments of the daily press of this city upon it. The case is an unusual' one as it involves political as well as civil in-terests. Though supposed to have been tak-en in secret, it is well known that the judges, by a vote of two to one, have adjudged the failure culpable. the Printings of Religio by Counselor Ara

renewed hope of an early termination; in great part, of the rigors of drouth and famine. On the 7th ultimo the procedure. province issued a circular to the relief agen cies calling their attention to the great neces sity of resuming work, especially in the planting of cereals and legumes. He state that since January, corn, beans and rice, for seed, have been forwarded to nearly all the districts, and directs that in those where seed has not been received, it shall be purchased at a reasonable price and distributed among the poor people. The cultivation of cotton is also recommended and, to this end, cutton is also recommended and, to this end, seeds will be distributed gratuitously.

ACCORDING to the New York correspond ent of the Fornal do Commercio, this city is about to be favored with a visit from an excursion party of prominent American mer-chants. The organizing spirit of the move-ment is a Mr. Bowen, of Chicago, the same gentleman who organized a similar junket-ing expedition to the City of Mexico a few months since. The excursion will undoubt-tedly be a pleasant one. Calm seas, comfortable travelling accommodations, a good table, a Brazilian winter—the pleasanter part of our year - and an endless succession of receptions and attentions, all will conspir to render the excursion an agreeable one have not learned whether the voyager will remain here more than the week days which the American steamer spends in port, but it is probable that they will be able in that time, to see and admire all the beau tiful scenery of this vicinity, and to mak many new acquaintances. They will certainly carry back with them many pleasan recollections of their fortnight in the tropics

THE Regenerator of Campos is congratu-lating the sugar interest of that region on the presence in the district of the "illustrious and distinguished" engineer, "Mr. Sellier, who promises to increase the production of who promises to increase, the production or sugar cane without augmenting the expense, by the simple process of extracting as much sap from the second-growth "suckers" as from the first crop of cane. "Bustrious and distinguished eigineers" are rich in theory but poor indeed in pratice, when they enter the field agricultural. Mr. Sellier, it is said, has "studied" the cultivation of sugar-cane. has "studied" the cultivation of sigar-cane for many years in the Antilles. It would be more to the point if he had, "worked" a plantation with profit and advantage; if he had been less "illustrious" and more of a practical hard- handed farmer.

CONTRARY to the general impression the American House of Representatives has refused to sanction the Senate's amendment to fused to sanction the Senate's amendment to the Postofice Appropriation bill, granting a subsidy to the United States and Brazil steamship line. It was supposed that the general recognition of the need of such a ser-vice would lead to the speedy appropriation of the inoney required; but in this respec-Mr. Roach and his friends have been griev-ously disappointed. We understand that the Brazilian recurrence will brefarm its part of Brazilian government will perform its part of the contract regardless of the course of the American government, but, in accordance with a special clause of the Berne posts treaty, it will collect from the latter the rates on postal matter accorded to it in

Among the amendments to the estimate of the Minister of Agriculture for the ensu ing year as passed by the Chamber of De es, we notice that of the reduction of the appropriations for the National Museum from 60,000\$ to 54,000\$. It is wew known among intelligent men, especially thos whose high regard for the material interes and progress of Brazil is real rather than affected, that the original estimates have beer totally inadequate in former year as re so now in view of the increase

irements of the muser of developing Science hije representing it in the scientific world; but only through it can the aspirations of the Brazilian vonta for scientific instruction

exact training, which can best direct the ma-terial development of Brazil. That this country sorely needs a large body of tho-oughly trained scientific men is one of the organy trained september men is one of the most evident facts of the day, and to meet this requirement the national legislature cuts down the appropriations and refuses needed assistance to worthy scientific institutions. It can afford to procure colonists at an enormous expense and locate them on worthless lands; it can allow its citizens to organ-ize costly explorations for gold and coal mines in localities where a trained man would determine their nonexistence, in pay ing quantities, in a moment; it can surve and resurvey land and water routes into ur nliabited and uninhabitable territory; an t can import men to do this work. In an other sense this unwise economy will pro a severe blow to the museum. - During the past year it has received the collections of the extinct Geological Commission — a collection which in scientific value is not interior to those of tha tinstitution. The classification and care of this val The classification and care of his val-uable collection is now a charge upon the few men now connected with the museum and the government expects them to do it on a decreased appropriation. If this is to be taken as a sample of the appreciation of science in Brazil, then surely M. Jobert had good reasons for the strictures which indignantly repelled only a few days since.

ECONOMIC USES OF THE BANANA.

In addition to its already well-known food ualities, it has been recently demonstrated that the banana possesses others of inestim able value. An excellent and highly nutritive flour can be made from the green fruit, which, it is said, makes a superior quality or bread. It is also claimed that both the flour and bread are specially adapted for use or long sea voyages, as they preserve their fresh-ness and are not liable to the attacks of insects. The flom is made by drying and pulverizing the fruit, gathered just be reaching maturity. It is said to be best w

no intruments of iron or steel are used in cutting or drying the fruit, as both the color and taste are injured by contact with this metal. Experiments have also showed that the ripened fruit contains seven per cent of sugar and is highly valuable in the manu-facture of rum. The French academician, Boussingault, says that one hundred kilo-

Boussingault, says that one hundred kilo-grammes of bananas will make nine litres of alcohol of ninety-six degrees proof. Should these experimental results prove as practicable and successful as is now claimed for them, their value to this country will be inestimable. The banana grows throughout the greater part of Brazil with little or no care, and produces abundantly. If it can be made into a substitute even in a slight degree, for the expensive, imported wheaten flour, or for the expensive, imported wheaten flour, or as a substitute for the national fairinha de mandicce which lacks good keeping qualities and is made by very rude and, troublesome processes, it will certainly be productive of incalculable benefits. Add to this the possibility of its becoming an article of export, and its full import to Brazilian industry, if adopted, will become apparent. Whether it will be fairly and fully tested is yet an open question. question

question.

There is yet another economic feature connected with it which deserves the careful attention of Brazilian planters—its value as a conserver of moisture. Boussingault claims that it keeps the soil moist, even in those countries where there are annually-recutring periods of drouth. In Venezuela the coffee planters are already utilizing this property of the banana trees by planting them between the rows of coffee trees. This experiment is said to have produced decidedly beneficial results. In this respect the coffee planters of results. In this respect the coffee planters of Brazil will do well to give the banana an early and thorough trial. Almost every seaearly and thorough trial. Almost every sea-son some of the coffee districts suffer from heat and drouth, and a preventive so simple and so inexpensive certainly deserves their

immediate attention.

Further than this, if it be true that its general culture, tends to modify the effects of heat and drouth by keeping the earth moist and fertile, while at the same time furnishing a highly nutritious food, its immediate dis-tribution and cultivation in the drouth-afflict-

de provinces of the North, becomes a ques-tion of vital importance. That the drouth will return again and again no noe doubts; if we cutture, especially that of the banan for voted so much is claimed, will mitigate its ming can not be made too soon rtainly has a more immediate and vital importance than the proposed culture cotton.

PATENTS IN BRAZIL.

The following brief compendium of the law and practice governing the matter of taking out privileges of invention and intro-duction, will prove of interest to our readers abroad.

Regarding the cost of taking out a privi-lege, very little can be said. If the inventor be "native and to the manor born," it is comparatively moderate, as he avoids the cos of powers of attorney, consul's certificate, rec ognition of consul's certificate and signature by the State department, translation of power of attorney, specifications, etc., by the offi-cial translator, and is only called upon to pay the usual revenue stamps and fees for transcribing—say about one hundred militéis. To the foreign patentee the cost may be any where from one hundred to five hundred milréis, depending upon the length of speci-fication and description, and fee of his at-

The constitution of Brazil, § VIII. art. XXVI., regnizes and gnarantees to inventors the righ roperty in inventions, and provides for their p

ognizes and guatesusproperty in investions, and provides for their postion by law.

The law of August 28, 1850, modelled on the
French law of 1810, was enacted in accordance with
this provision of the constitution.

By the faw of 1810 are classified as inventions:
1st.—Biscovery of a new industry.
2d.—Improvement of a known industry.
1.—For the introduction of foreign industries the
Government grants privileged concessions subject
to the approval of the legislative power.

II.—The leading principle of the law of 1850 is
the effect that government assumes no responsibility,
but grants privileges irrespective of originality, noveltv, or utility; consequently previous examination

the vital elements of the

plans and specifications, the government submit them to the "Sociedade Austiladora da Industri Nacional," an association of savants incorporated by the state, where they an referred to the appropriate committee to report upon.

IV.—The "Sociedade Austiladora da Industri

8

Nacional " is also consulted by the Government regarding privileges of introduction.

V.—This examination simply guarantees that the invention is not prohibited by the law, or prejuditudino, and implies a certain degree the invention is not prohibited by the law, or preju-dicial to the constitution, and implies a certain-degree of probability that the invention has not been pre-ciously known in the Empire.

VI.—The Covernment genus privileges of intro-duction only upon being fully convinced of the advantages to be derived.

VII.—No privileges of invention, improvement or introduction are conceded without a consultation with the attorney of the crown and national trea-

with the attorney of the crown and national fearsury.

VIII.—The title of a patent is a document (Caria
Apperial) signed by the Eupero, and ecuntersigned
by the Minister of Agriculture, Commerce and Public
Works. The latter takes cognizance of all questions
relating to this subject.

IX.—The Caria Imperial finitis the term of the
privilege, and fasse whatever other conditions circumstances may require.

X.—It is menubent on the government to fix a
term of not less than five years, nor more than
twenty years, as the duration of a privilege. These
timits are established by law.

XI.—This patent or executive decree is not effective until approved by a solve of the national legis-

antil approved by a vote of the national legis

ture. XII.—Application for patents must consist of the

llowing documents.

1st.—Petition to the Emperor requesting the grant of a patent, stating clearly the object of the invention and the term of years it is intended to cover.

invento

inventor.

3d—Document proving that the petitioner has deposited in the public archives models, designs or, plans and specifications.

XIII.—Foreign patenties may present their applications by a daly empowered attorney.

XIV.—The patent being conceded, the patentee may sell or transfer all or, a part of his right under the laws governing the, sale or transfer of other property. property

It will be seen that the way of the applicant is not very clearly defined, nor are his rights very rigidly guarded. The clause making legislative consent a sine qua non is practically a bar to the granting of any important privileges of invention, and the ab-sence of "patent" legislation, or "patent" laws to enforce judgment against infringers, makes the holding of a privilege rather a dubious possession.

COFFEE PRODUCTION.

Messirs, Editors :- It will doubtless interes MCEUT, Educo's:—It will doubtless interess some of your readers to learn something of the cost of growing coffee in this country, and having on three several occasions, viz: in 1850; 1860, and 1875, endeavored to inform myself upon this subject, I arrived at. the following conclusions:

In 1850, that to obtain a return of 6 per cent. from the capital employed, required a sale price in this market of 3\$800 per arroba; that to reach the same result in 1860 it required 6\$600, while 7\$500 were required in

These estimates were based upon an aver the extent of the crop—diminishing with a large crop, and increasing with a small one. An average crop may be considered about three millions of bags, weighing 60 kilos

While in 1850 my investigations led me to the conclusion that 3\$800 per arroba was necessary to give the planter 6 per cent. upon his capital, it was asserted by one of our important planters that he could sell coffee at 2\$000 per arroba, and make a profit of 800 réis per arroba. He however based his calculation simply upon the actual cash outlay in producing an arroba of coffee which in his case was 1\$200 per arroba, and he consequently maintained that 25000 per arroba gave him a profit of 800 réis on each arroba. He made no account of the interest on

his capital and the yearly diminution, by death and old age, in the value of his slave property—items which together with cost of transport, commission on sale, etc., I found to uivalent to 25600 per arroba

The cost of 7\$500, adding thereto the duty of 13 per cent., cost of bagging, shipping expenses, commission, freight, insurance and the unavoidable charges on the sale at a port of the United States, being estimated at the par of exchange here, involves a sale price of about 181/2 cents, to cover cost and

charges, without profit to the shipper.

Various causes have combined to increase
the cost of growing coffee in this country,
chief among them, however, being the fact that, from the exhaustion of the soil, the plantations have receded further and further from the coast; and the great increase in the

When I came to this country, in 1826, and for some years later; beautiful coffee planta-tions lined the harbor to its very shores in many places, and could be seen, in all direc-tions, around the city. Now no important leather, if not carefully guarded in tin trunks.

plantation is found at a less distance than one hundred miles from this city.

Negroes were sold in 1826 for two to three hundred milreis, which are now worth two thousand milréis.

Again, our defective currency system—the volume of the currency having, for many years, been greatly excessive-also tends, no small degree, to maintain a false cost to our planters.

The estimates I have presented have espe-

cial reference to the region more immedi-ately tributary to Rio de Janeiro.

From the fact, that, owing to the greater exuberance of the soil, the yield per tree is much larger in the province of S. Paulo, than in the region previously referred to, it is very probable that coffee may be produced there somewhat more cheaply.

Yours respectfully, ROBT. CLINTON WRIGHT.

Rio. 28th, March, 1879.

PLAGUE OF RATS IN BRAZIL.

From time to time in all parts of Brazil the plantations are subject to the depreda-tions of armies of rats that issue from the forests and consume everything edible that comes in their way. During a recent excur-sion in the province of Parana I found an almost universal lack of corn throughout the province due to such invasion of rats by which almost the entire crop of last year had been destroyed. This invasion, or plague as it is called, is said to occur at intervals of about thirty years and to be simultaneous with the drying of the taquara, or bamboo, which everywhere abounds in the Brazilian forests. The popular explanation is that every cane of bamboo sprouts with a grub, the germ of a rat, within it, and that when the bamboo ripens and dies the germ becomes a fully de veloped rat and comes out to prey on the plantations.

An educated and observant Englishman, Mr. Herbert H. Mercer, who has resided a number of years in the province and had an opportunity of studying the phenomenon, kindly furnished me the following rational and curious explanation.

The bamboo arrives at maturity, flowers and seeds at intervals of several years which doubtless vary with the different species. doubtess vary with the different species. The period for the species most abundant in Parana is thirty years. The process, instead of being simultaneous occupies about five years, a few of the canes going to seed the first year, an increased number the second, and so on progressively till finally the remaining and larger portion of the canes seed at the same time. Each cane bears about an peck of edible seed, resembling rice, which is very fat and neurishing and is often eaten by the Indians. The quantity produced is enormous and large areas are often govered to at depth of five or six inches. After seeding the cane dies, breaks off at the root and falls to the ground, the process of decay being hastened by the borings of larva which live-upon the bamboo and appear to be particularly abundant at seeding time. These larva have doubtless given rise to the story of the grub developing into a rat. New canes spring up from the seed but require seven or eight years to become fit for use and thirty to reach maturity. During this time, bamboo splints which are extensively used for mats, baskets, hampers for pack mules, etc., become an article of commerce from one part of the province to another and I met several troops loaded with them ascending from the litoral to the interior.

With this sudden and constantly increasing supply of nourishing food for a period of five years, the rats and mice, both of native and imported species, increase extraordinarily in numbers. The fecundity of these animals is well known and the result after four or five years of an unusual and constantly increasing supply of excellent food and in the absence of enemies of equal fecundity, can readily of enemes of equal regularly, can reamly be imagined. The last of the crop of seed being mature and fallen to the ground, the first rain causes it to decay in the space of a very few days. The rats suddenly deprived of food commence to migrate, invading the plantations and houses and consuming everything that does not happen to be repugnant to the not very fastidious palate of a famishing rodent. If this happens at the time of corn planting, the seed is consumed as fast as it can be put into the ground. Mr. Mercer, who plants annually about fifty acres of corn, re-planted six times last year and finally gave up in despair. The mandioca is dug up; the rice crop, if it happens to be newly sown or in seed, is consumed, as is also everything.

Mr. Mercer relates the following of one of these migrations which rivals the famous old stories of the wicked old bishop of the Rhine and of the Pied Piper of Hamelin and shows a wonderful instinct. The forests of Tibagy are separated from those of Castro by from twelve to sixteen miles of open grassy campo in which there are no plantations and which produce absolutely nothing on which a rat can feed. Through this campo flows the river Tibagy, a switt torrent from 150 to 100 rards wide. The season at Castro is some-what later than at Tibagy so that when the seed vards wide. rotted at the latter place there was still an abundance of food at the former. Guided by some instinct an army of hundreds of thousands of rats set out from the forests of Tibagy for those of Castro, swimming the river and traversing the campo which to them must have been a perfect Sahara. Too fat to run, they could be killed with a stick with the greatest facility and the poorer people took advantage of this fact to provide themselves with fat for soapmaking. Thousands, unable to find a hid-ing place on the campos by day, died from exposure to the sun. A few weeks of scarcity sufficed to reduce the number to the normal quantity that can find food in the forests and this year the plantations have not

If we suppose a region to be so situated that no new supplies of plants or animals reach it from without, except by some rare chance, as is the case with some natural history provinces, we can readily imagine a combination of simple and perfectly natural circumstances by which the ripening of the bamboo or any other food plant of long perieds of fruiting, might bring about a pro-found modification in the flora and fauna of a region. Driven by hunger, the rats might entirely destroy the seed or roots of plants not usually subject to their depredations, and so exterminate the species. Or with certain circumstances of the character of the country and of the weather the whole rat tribe might in their migrations become exterminated as a result of the very cause that had produced its extraordinary increase, or supposing the presence of some enemy of fecundity somewhat approaching that of the rat, this, with the increased food furnished by the latter, might become sufficiently numerous to entirely de-stroy the rat tribe when the supply of food ceased and then in turn driven by hunger might attack and exterminate some othe species which had hitherto, when its enemie were less numerous, been able to sustain its Struggle for Existence.

ORVILLE A. DERBY.

In the list of mercantile navies of the world, Great Britain stands at the head with a tonnage of 6,399,869, and the United States second with a tonnage of 4,538,183. gards the nature of the service in which their merchant fleets are employed, there is a very wide difference. From the total tonnage accredited to her, Great Britain employs in her foreign trade a tonnage of 4,888,560—a tonnage exceeding that of any other mercantile navy in the world-while the United States employs in this service only a tonnage of 1,553,705. The vast coasting and river trade of the United States will account for this proportional disparity, in a great measure.

COMMERCIAL

Rio de Janeiro, April 4th. 1879

Rio de Janiero, April 4th. 1879

Steadiness has been the lending feature in our import market during the period since our last tended to a firmace on the part of holders of all nattended to a firmaces on the part of holders of all nattended to a firmaces on the part of holders of all nattended to a formace on the part of holders of all natices of consumption, particularly with respect to Manchester goods. Arrivals have been very limited; and business in general is confined to immediate vanus only, in view of a higher exchange which for copperations have of late been much restricted, and the strain of long credit seems to be beginning to be fall by all flow fleading importers; and the long continued cheapness of codec, (which has so to seen such over values for many years, added to the centeral low values for many years, added to the centeral four values for many years, added to the centeral four values for many years, added to the centeral four values for many years, added to the centeral four values for many years, added to the centeral four values for many years, added to the centeral four values for many years, added to the centeral four values for many years, added to the centeral four values for many years, added to the center of the countries of the count

Inhoris.

Hours. The inquiry has been quite of a retail character, and as stocks at sea are large no immediate improvement in prices is to be looked for. Arrivals have been 64,500 bernis. See how the following the control of the following the control of the following
Expert.

Coffee. The market-ruled quiet for a few days after our hat and decliers were becoming somewhat amounts sellers. The stremuous efforts however that were inacte to recover the rate of exchange and a general belief-that bottom had been touched, caused a revival of the demand for the tean, and a first business has lately been done at enhance rules as per continuous of the continuous and the continuous a

Supplies nave averages up-roomage per source. 2-root large.

Pontations per arroba for United States Selections Superiors 9,400 at 9,500 at 100 at

Exchange for the past week flunctuated between 20 1/2 d. and 20 7/8 d. for bank paper and 20 1/16 d. and 21/18 d. for mercantile paper closing April 37d. firm at 20 1/2 for the former and 20 1/16 for the latter.

SHIPPING NEWS.

ARRIVALS OF FOREIGN VESSELS.

MARCH 22.

NEW CASTIR.—British ingger Blackpool; 291
tons; Arkinson, master; 5f days; carra, coal
and coke, to Norton, Megaw & Co.
BAITMORE.—British bark Campaners; 271
tons; Warker, master; 7f days; flour and lard
to Pripps Bros & Co.
GENOA.—British steamer Arch Druid; 381 tons;
Carmichael, commander, 38 days; general cargo
to Manuel Crest & Co.
MONTYHIBLO.—Portagnese brigantine Timber;
Est tons; thomes, master; 10 days; cargo, jerked
RETURNED TO PORT.—Swedish bark Japite; or
Tabaseo daren Brand treturned because of illuse
on board.

on board.

MARCH ≥3.

SANTOS.—Betish steamer Tagus; Gillies, commander; 17 hours; passengers and cargo in trans

Reinertsen, master; 88 days; genoral cargo to J. A. J. Penke.

UNOTIO—Portinguese bark. Margarida; 703. tons; Shira Junio; master; 43 days; cargo, sline.

CARDPE—British bark Fene; 331 tons; Dansel, master; 53 days; cargo, ratirond supplies. RICHMOND—German bark Anna Fon Kleis; Stons; Kanack, master; 98 days; cargo, filon; to Pupps Brox. & Co.

MARCH 29.

LAYRIPOOL—British Atomor Georald; 800
LAYRIPOOL—British Stemmer Georald; 800
KARSHALESS—German bark Wilhela Hawk; 421
tons; Fretwoners, master; 81 days; general cargo to Gauwen & Co.

CARDPP—Dritish ship Said Janes; 132 tons; Svenson, master; 86 days; general cargo to Sauwen & Co.

CARDPP—Dritish ship Said Janes; 132 tons; Swenson, master; 96 days; cargo, coal, to Wisson Sons & Co. Lautted.

Swansea.—British brigantine Topa; 160 tons; Harris, master; 81 days; cargo, coal, to Hariwig, Williamson & Co.

M.I. M. 195.

GENOA.—German steamer Hollensollern; 1,900
tons; Richard Sander, commander; 20 days;
passengers and general cargo to Brandes Kramer & Co.; brought 314 Italian and Austrian incimisrounts.

migrants.

CARDIFF.—British bark Mary Frg; 981 tons;
York, master; 73 days; cargo, coal, to order.

JERSEY.—British brigantine Raper; 137 tons;
Remoul, master; 56 days; cargo, codfish, to P. S.
Nicolson & Co.

Nicolson & Co.

MARCH 27.

LIVERPOOL.—British steamer Sorata; Massey,
commander; 22 days, 3 days from Balita; 33
first-class and 171 third class passengers.

RIVER PLATE.—British steamer Bessel; 1.243 tons; Hudson, commander; 5 1,2 days; passen-gers and general cargo to Norton, Megaw & Co. SANTOS.—German steamer Falpocalso; 1,543 tons; von Holten, commander; 18 1,2 hours; son sengers and coffee, in transit, to Edw. Johnston

& Co.

German steamer Graf Bismarck; 1,559
tons; Hagemann, commander; 20 hours; passengers and collec, in transit, to Brandes Kramer & Co.

mer & Co.

— German steamer Hermann; 1,990 tons; Lamke, commander; 16 hours; passengers and coffee, in transit, to Brandes Kramer & Co.

Loxpox.—Brilish back Waifred; 317 tons; Tranks, master; 57 days; cayo, cement for the Gabrielli water works.

TRAPANI.—Swedish bark Amaranth; 279 tons; Nilssen, master; 90 days; cargo, salt, to J. M. de Miranda Leone.

Bostox.—American bark Shelland; 983 tons; Hashell, master; 36 days; general carge to Wright & Co.

Wright & Co.

Oporro.—Portuguese bark Clotilde; 211 tons;
Pacheco, master; 45 days; salt and general cargo
to J. M. de Miranda Leone.

SETURAL.—Norwegian bark Nicolay A. H.
Kundon; 271 tons; Peterson, master; 32 days;
cargo, salt, to order.

argo, salt, to order. NEW YOR.—American brigantine *John Sher-*rood; 429 tons; Mankin, master; 50 days; general argo to A. C. Nathan & Co. irgo to A. C.

MARCH 26.

LONDON.—Swedish lugger Patria; 234 tons; Hogstron, master; 57 days; cargo, rice, to Camara & Gomes.

Camping and the brig Golden Plever; 235.

CARONIAL mister; 90 days; cargo, cod., to Alex. Wagner.

RIVER PLATE.—French steamer Saroie; 1,725 tons; Guirand, commander; five days; passengers and cargo, in transit, for Marseilles.

SAN MICUEL.—British bark Inagger; 430 tons; Bolin, master; 40 days; cod in ballast to Burnett, Wright & De Castro; 118 Portuguese immigrants. MARCH 28.

NEW YORS and intermediate ports.—American steamer City of Rio de Janeiro; Weir, commander 22 days; 24p2 days from Bahia; passengers, and general cargo to Wilson Sons & Co. Limited

general cargo to Wilson Sons & Co. Limited.

LOXDON and internendiate provise. Belgian
steamer Horrac; 1,101 tons; Mitchell, commandder; 38 days, 312 days from Balain; passengers,
and general cargo to Norton, Mesaw & Co.

MARCH 29.

SANTOS.—Frem steamer Son Martin; 1,008
SANTOS.—Frem steamer Son Martin; 1,008
SONTOS.—Frem commander; one day; passengers, and general cargo, in transit, (o. A. Leuki,
Calibrac, fra Montevideo; — British steamer
Talparaties; Hamilton, commander; 25 days,
4 days from Montevideo; passengers and cargo
in transit.

PENACOLA.—British lugger Jessica; 209 tous; Pearce, master; 66 days; cargo pine lumber to A. C. Nathan & Co.

Barbay, master; 55 days; cargo, pine lumber,

THE RESERVE OF THE PARTY OF THE

MARCH 30.

HAMBURG and intermediate ports.—German steamer Saulos; 1.589 tons; Hoydorn, com mander; 23 days, 3 1/2 from Bahia; passenger and general cargo to Edw. Johnston & Co.

RIVER PLATE — British steamer Nestoria; 1,748 tons; Ritchie, commander; passenger and general cargo, in transit, to Watson, Ritchie & Co.

Southampion and intermediate ports.—British steamer New; Bruce, commander; 20 1/2 days, 2 1/2 days from Bahia; passengers and general cargo.

general cargo.

APRIL 1.

MARSHLUS-German bark Fides: 320 tons:
Gallard, master; 117 days; general cargo to
H. A. Dreyfus.

BEUNSWOK.—American bark Meadota; 513
Whittennin, master: 55 days; cargo, pine humber, to order.

APRIL 3.

APAIL 3.
LIVERSOEL and intermediate poyts.—British steamer Landace; 301 tous; Schoffeld, commander; 35 days, 25 days, from Balha; passengers and general cargo to Norton, Megaw & Co.
NEW YOSK and intercuediate ports.—British steamer Cossini; 337 tous; Rains, commander; 20 days, 4 days from Balha; general cargo to John Moore & Co.
Baltitonie, —American bark Adeloide; 301 tous; Balley, musier; 35 days; cargo, flour, to Thippa Brock & Co.

JERSEY via Pernambuco.—British brig Cana-da; 156 tons; Carral, master; 39 days, 14 days from Pernambuco; cargo, codfish, to order.

iron rermanuece: cargo, contast, to order. Betavos Awas, Samaish brig Salenday; 165 tons; Horta, master; 22 days; cargo, jerked beef, te José Romaguera. TUP, Spanish sloop Andar; 231 tons; Foint, master; 24 days; cargo, jerked beef to Miranda, Aevenda & Co.

Miranda, Azevento & Co. FANNIS, ISLAND (Paeiñe). — French bark Occas i 562 tons; Duebine, master; 86 days, eargo, guano, en rotte to Hamburg; called at this port for supplies.

this port via Bahia.— British brigantine J. L. B; 147 tons; Robson, master; 53 days, 10 days from Bahia; cargo, codfish, to Johnston & Co,

Bahia; eargo, codfish, to Johnston & Co, Buenos Avers,—German brig Guslav; 181 tons; Nielsen, master; 15 days; cargo, jerked beef to Miranda, Azevedo & Co.

PAYSANDE, — German brigantine Clara: 120 tons; Eifing master: 20 days; cargo, jerked beef, to Sonza, Irmão & Rocha.

Portro Alegar,—Portuguese brigantine Rapa; 186 tons; Sampaio, master; 27 days; cargo, pro-visions, to José da Rocha e Souza.

DEPARTURES OF FOREIGN TESSELS.

WARCH sa.

MARCH 22.

New-Youx-Belgiam steamer Typho Brisher, 1588 tons; Meller, commander; cargo, coffee.

HAYDE, French bark Franciscopolis; 378 tons; Bloute, master; general cargo.

LISBON for orders—Bittish lugger Mary Front; 30 tons; Sussband, master; cargo, coffee.

RAILLA, British bark Naruth; 298 tons; Mansfield, master; general cargo.

MARCH 23.
UNITED-STATES.—American bark H. W. Thomas; 671 tons; Drisko, master; stone in ballast. m, art cons. Densto, heister; stone in batlast, Sembrero, British brig Autopoint; 551 tons; Winter, master; stone in ballast. Aracary for orders.—Russian brig Union; 402 tons; Ramsfron, master; general cargo.

MARCH 24.

SILUCCH 24.
SOUTHAMPION and intermediate ports.—British steamer Tugos: 1.923 tons; Guilles, commander: 116 passengers. MARCH 25.

MARCH 25.

BALTIMORE.—American bark Ama;on; 223
tons; Myrick master; cargo coffee,
SANDY HOOS.—British ship Robert L. Lane;
1,152 tons; Young, master.

MARCH 26. CEARA'.—American brigantine Bogold; 298 tors Johnson, master: general cargo. MARCH 27.

MARSELLES and intermediate ports.—French steamer Sazoie; 1,726 stons; Guiraud, command-er; passenjors, coffee and general cargo. BARRAPOES.—American brigantine Rocky Glen; 406 tons; Higgins, master; stone in ballast.

Tabasco.—Swedish bark Jupiter; 453 tons; Hedberg master; some inbullast.

Hedberg, master; some in bullast.

MARCU S.

Lyvensynt, and intermediate ports.—British
stemmer Bosset; (1287 nors; Hubson, commander;
passengers, cultic and general earge.

CALLAD and intermediate ports.—British
stemmer South; Massey, commander; passengers and earge in transit.

PINSACOLA—Argentine bark Lucie Marie; 529
tons; (Dirter, master; stone in bathast.

GASU.— British brite Cocanophia; 157 tons;
Remort, master; in bullast.

Renorf, master; in ballast.

MARCH '99.

BREMEN and intermediate ports.—German
stemmer front Binnorek; 1,559 tons; Hageman,
commander; passengers and general error.
Amstrong commander general error.

HAMPTON ROADs.—American bark, Nephow;
H2 tons; Royer, master; stone in ballast.

PENNACOTA.—French bark Rice New; 491 (1915)

Perror, master; tru ballast.

Lisbon.—Danish brigantine C. C. Hosning; 199 tons; Andersen, master; cargo coffee.

(9) tons; Andersen, master; cargo coffic. MARKU 3: 0. intermediate ports.—German steamer Infraction; 2:300 tons; von Holten, commander; passengers and general cargo. HAVE.—Proch steamer Son Martin; 1:408 tons; Guegan, commander; passengers and gen-eral cargo.

era cargo.

LAUERFOOL and intermediate ports.—Beitish steamer Talparaiso; Hamilton, commander; passengers and general cargo.

New York.—German steamer Hecmans; Lamke, commander; cargo, coffee.

Santos.—German steamer Arch Druid; 825 ns; Carmichael, commander; cargo cement. St. Thomas.— Norwegian brigantine Pacific 397 tons; Grunwen, mas.er; cargo, coffee.

NORTHERN PORTS. - French bark Alexander: 235 tons; Sion, master: stone in ballast.

AFRIL 1.

BALTIMORY.—American lugger A. Healon; 483 tons; Rogers, master; cargo, coffee.

SALT 518AND.—Portuguese ship, Nova Goa; 714 tons; Oliveira, master; general cargo.

74 tons; Oliveira, master; general cargo, APRIL 1.

SNYDS-British steamer New; Bruce, com-mander; passengers and cargo in transit.

GIBRALTER,—British brig Crickieth Castle; 221
tons; Morris, master; cargo, coffee.

WEST INDER,—British lugger James Wilson; 54 tons; Dayke, master; stone in bullavt.

Rio GENNE,—Portuguess alony Novo S. Low-reage; 118 tons; Franco, master; cargo cool.

BRAZILIAN FINANCE.

In the present unfortunate financial condition of Brazil, every intelligent discussion of causes and remedies must necessarily command a careful and widespread consideration. Whatever may be the conclusions and theories of the financiers and legislators of the government, and they are without number, it is evident that the carefully-considered opinions of business men, whose pursuits have made them thoroughly familiar with this and kindred subjects, must be entitled to more than passing notice. In an article recently published in the *Anglo-Brazilian Times*, Mr. Robert C. Wright, one of the oldest and best known merchants of this city, enters into a very candid and thorough discussion of the excessive issue of paper money Brazil, and of its effects upon the credit and prosperity of the country. The following is an abstract of the article which our space does not permit us to republish entire:

space does not permit us to reputsal nature. In maintaining the standard of value, or in restoring it if temporarily disturbed, lies the whole duly of government in connection with the currency of a country. With the Imited fluctuations of Exchange the government should have no connectn, as they simply indicate the varying relations of the "bidnine of payments" in the foreign commerce of a country. These fluctuations are the trade-harometers of the merchant and statesman and should be left as free as the ship and flow of the title.

as the ebb and flow of the tide.

The standard of value in this country being a legal

as the ebb and flow of the tide.

The standard of value in this country being a legal valuation of the vibrary of gold at 45000 which is equivalent to risk pence of British standard gold, the par of exchange between Brazil and Great Britain is 27 pence per matries. Exchange between these two countries now stands at 20 1/2 pence or some 25 % below part, time sctablishing the fact of a great dependence of the standard of value.

Paper money never has been and never can be capital. It is simply the representative of capital and is only useful so long as the sum of its value in circulation corresponds with the value of the metal which it displaces. Some writers, forgetting that principles have neither latitude nor longitude, that principles have neither latitude and vigorous country and full of resources, could violate with impunity all the rules of sound economy; that the country might be flooded with an unlimited amount of paper circulation to be great advantage. They ought now to think otherwise and to see that the critish of the principles of the principle of the principl

capitat which total wants, can not be obtained from a paper currency. One of the worst features of an excessive currency, laving a reasonable guarantee of future redemption, is that it maintains a false and phenomenal relation to gold thus inducing exaggerated gold prices of the products of a country and ultimately prejudicing the interests of producers through the competition which it is sure to provoke. Our planters are realizing the products of a claim, an animate y passenged in interests of producers through the competition which it is sare to protoke. Our planters are realizing the truth of this by the low prices at which they an now compelled to sell their products which is, in part, due to the foreign competition occasioned by the high prices long prevailing in Bazil. This illegitimate cangeration of prices applies as well to imported merchandise as to the products of the country, and, as a consequence, has a tendency to repress the ex-port while encouraging the import trude, and thus acts as a permanent element of disturbance in the trada relations of the country. In 1850, according to the able reply of Mr. J. C. Mayrish to the circular of the Minister of Finance, the currency of Brazil consisted of : [footcomment tapper. 46,000,000\$

a sted gold, silver and copper.

5,000,000\$ 52,000,000\$

As exchange on London was then 28 38 pence, about five per centum above par, it may be assumed that there was a deficiency in the circulating medium. It is our opinion that this premium was due to in. The contails lealance of trade and not to a deficient circulation, but admitting the latter the addition of five per centum to the existing currency would give us only about \$5,000,0005. Taking the increase of population in the United States, about 33 1/3 per cent. per decade, as a basis for estimating the increased wants of Brazil we find that the country requires to-day a currency of about 15,000,000\$. The actual circulation of government and bank paper, however, is some 268,000,000\$. This that the county is the actual circulation of government and bank paper, however, is some 286,000,000. This represents a phenomenal value of about 156,000,000 gold, while, upon the basis of legitimate prices; is should not exceed 125,000,000. cess of 83,000,000\$ in our present circulation, which in order to restore the standard of value to a normal basis, should be withdrawn.

It is possible that the withdrawal of a much le It is possible that the windaward of indict less mount than 83,000,0005,—say 50,000,0000—migh aise exchange to par, but such a rate established under such circumstances, would not be legitimate under such circumstances, would not be legitimate, and any powerfully disturbing cause might send it down again five or ten per centum; while the with clawal of the whole \$3,000,000\$ would establish the par of exchange on a legitimate basis where it would be maintained by the currency necessities of the country and where it would be subject only to such fluctuations as might occur with a purely metall

The withdrawal of this excess in the circulating The withdrawal of this excess in the circulating medium becomes, then, an imperative obligation upon the government and the manner by which is shall be done is of vital importance. The govern-near, wars and administers the Dom Pedro II rail-road, estimated to be worth 19,000,000,000; and it is claimed by some of he leading statesmen that she claimed by some of net teaching the mortinain property of monastic orders which is of enormous value. It would be wise policy, therefore, to apply a portion of these enormous resources to the fulfillment of this m reastive obligation commanded as it is no less by one one one lionesty than by sound policy. Such a necession of collers measure would immediately restore while confidence and poliched.

dence and would not only arrest the flight of foreign capital from this country but would most probably turn its current again this way. If there be national or other susceptibilities involved in the sale of the Dom Pedro II road then it, either alone or in con-

Dom Pedro II road then it, either alone or in com-junction with the mortunian properties, might serve as a basis for the issue of debentures: through which the same purpose could be accomplished as by a safe. No attempt should be made to holster up ex-change by any of those devices which have so sig-nally failed in times past. Both here and almost, when resorted to, they have over-stimulated trade, encouraged speculation, and resulted in disaster. Temporary expedients and palliatives are not the remedy for this disease; it demands heroic treat-ment.

REPORT OF THE BUDGET COMMITTEE. The report of the Committee of the Budger, The report of the Committee of the Budger, composed of the deputies Bharque de Macedo, Cezar Zaung, Prado Fimentel, Pabio Reis, Viria-to de Medeiros and Sonza Carvalho, was present-ed to the Chamber of Deputies, March 29, and ordered to be printed.

From it we extruct the following summary of the financial condition of the Empire and the means proposed by the government to meet the deficit.

telicif.

The revenue for the financial year 1879-1880, s estimated, on the basis of the revenue of the three succeeding years, at 103,000,00500.

The appropriations proposed in the Budget nelading both ordinary and extrinciliarry expenses amount to 145,000,000800.

The autoripated deficit is therefore 44,000,0008. In the second discussion of the Budget a few

The autoipated deficit is therefore 4,000,0008. In the second discussion of the Budget af Sw additions and numerous reductions were made and others will probably be made in the triid discussion, which the committee calculate will economize in the ordinary expenses the six of \$0,000,0000 and in the extraordinary expenses \$0,000,00000 and in the extraordinary expenses. The committee propose measures by which it is calculated that the revenue will be increased by \$1,000,000000 which with the economies above menhaned will reduce the deticit to, reduction the definition of the committee of the commi

almost to 3,500,000500 of which 1,500,000500 will probably only be expended in the succeeding Bready coursing the means to be adopted for resting the bulance between recipits and expending the post of the opinion that no further reductions can be made without serious probability and the face of a definit to muleitake may sweeping financial except the first that it would be unsafe in the face of a definit to muleitake may sweeping financial except the first threat the referred and the present referential that it would be unsafe in the face of a definition of the tension without familiary permanent relief; and that therefore an increase for present small by the form management of the finances and by comony; real and morally in the capacity of the public money, the present unitary and the continuous productions which it is heped are only transitory, shall have passed.

The caston house being the chief source of revenue, attention is maturally first directed to that. The persone revision of the tariff will equalize and simplify the duly rather than increase the recognition of the freal field tidnal duly of 45 % on imports was raised to 62 %, and the administration tax of 12 %, on articles admitted free of duty, to 5%. From this measure q nonsiderable increase may be expected. An addition to the duty of foreign tobacce, and the restriction or abolition of the free light which at least 3,000,0000 or lost to the Treasury, is recommended, as well as an increased lax on storage. Expert duties are to remain as at present until the chrest storace of 1,000,00000 in the restoun-tons receipts is expected.

To obtain vecture from the folion of the free light which at least 3,000,0000 or lost to the Treasure at present until the chrest storace of 1,000,0000 or in the restoun-tons receipts is expected.

To obtain vec

mitter recommend that the inguinouse tax be doubled or substituted by an anchorage tax, which it replaced, and the dock tax he revised; that the stapp into, fixed or proportional, on business papers, tittes of publity, scientific and ther diplomas, etc., as well as the enodument tax, he also doubles and the state enodument tax, he also doubles and the state of the stap in a state of 2500 and the second 4500; that the impost on the capital of lotteries be raised from 19 %, to 30 %, and on the premiums from 15 %, to 30 %, and on the premiums from 15 %, to 30 %, and on the premiums from 15 %, to 30 %, and on the premiums from 15 %, to 30 %, and on the premiums from 5 %, to 30 %, and on the premiums from form the centeral povernment, of 25 %, and become tax be levied on all salaries, pensions and gratifications derived from numicipal, provincial or general government, of 25 %, and 18 sums less than 1,000500 and greater than 1,000500 on the general, and less than 400500 from the tax of 10 %, and
An American, named S. H. Hamilton, has invented a process of making hard and durable lumber out of wheat straw. All the effects of polish and finish obtained with black walnut or mahogany are reproduced, and it is said to be specially adapted for inside work and furniture. The lumber is obtained by taking ordinary straw boards, such as are made at any paper mill, subjecting them to the action of a peculiar chemical solution until the fibre is thoroughly softened, and then passing them through a succession of rollers by which, they are dried, hardened and polished.

COFFEE CROP OF 1879

Concerning the approaching harvest of coffee a recent letter from the interior says:
All probabilities of an average crop this year are lost. It seems to us that in-the valley of the Para-hyba the coffee 'crop of 1879 will scarcely be a third of that of the preceding year.
Various causes have led to this result. The decay of the plantations in some localities from age, fin other points, disease of the roots and leaves, and in general the utter lask of effort toward a more methodic and scientific cultivation.
In the districts of Rezende, Barra-Mansa, Firaby, Vassourras, Valença, Mar de Heyanha, etc., there is a tendency to a progressive dimination of the coffee harvests until utter extinction. We except in these districts those zones in which the forests have been destroyed in a lesser degree and in which some of the plantations are still new.
In northern Minas the cultivation of coffee is in a period of development notwithstanding that it has contend with a fact of labores. The storms have, however, caused the loss of the greater part of the first.

time, a good harvest in 1879.

Notices from Sa Paulo seem to indicate that the

op will be a third less than the regular harvest, seems to us therefore that we shall not be far wrong It seems to us therefore that we small not belar wrong in stating that in general the coffee gathered will equal a shalf of the crop of 1878. As however there still exists a portion of that crop in deposit the exportation of coffee will be regular during the whole of the current year to fail entirely in January of 1880.

of the current year to the chance; in January, 1880.

Nothing can be said regarding the quality of the coffee of the approaching harvest, but as, the plantations are in general new it is probable that the medium and first qualities will abound.

THE ROACH SUBSIDY BILL

The following is the full text of the Brazil-ian mail steamship subsidy clause in the Postoffice appropriation bill, as it passed the United States Senate, February 21. When the bill came up in the House of Representatives on February 28, the subsidy clause was stricken out by a vote of yeas 89, nays 157.

For ocean steamship service between the United States and _razil, \$200,000; and the Postmaster-General is authorized and directed, after due public advertisement, to contract for a time not exceeding ten years for carrying the mails once each month, commencing not later than July, 1879, from New York by way of Norfolk, Va., to Rio de Janeiro, son, by way or norrolls, Va., to Rio de Janeiro, and once each month, commencing not later than March, 1880, from New Orleans, by way of Galveston, Texas, to Rio de Janeiro and return, including appropriate intermediate ports, with the lowest hidders, being responsible owners, giving ample seton, Texas, to Rio de Janeiro and return, incaning appropriate intermediate ports, with the lowest bidders, being responsible owners, giving ample sentity of first-class American bullt and owned some centry of first-class American bullt and owned for making thirteen mautical miles an hour; such mall-carriage to be paid for at not exceeding \$50 per nautical mile per annum, one vay, for the distance actually traversed between the termini of each of said routes; provided however, that the annual compensation for such postal service shall not exceed the sum of one hundred and fifty thousand dollars for gach of said lines, the two lines to be contracted for simultaneously, and neither contract to go into effect unless Joth services shall be contracted for and established recording to the provisions of this act; neither contract to be considered in force if the service on either line be abandoned or discontinued, and the contracts therefor to contain all provisions for securing efficient service which may be customary or required by law in such cases.

It seems that opposition to Chinese inmigration

any or required by the in sent cases.

It seems that opposition to Chinese immigration is not wholly confined to the Pacific slope of the United States. At Melbourne, Australia, where the Celestals have gone into the retail trade and are contriving to sell ten at a lower price than the Caucasian grocer, a strong and: Chinese feeling has sprung up. The retailers are loadly demanding that their interests shall be protected. It is thought probable that Oncomball, New South Wales and Victoria interests shall be protected. It is thought probable that Queensland, New South Wales and Victoria

ap. The retailers are loudly demanding that their interests shall be protected. It is thought probable that Queensland, New South Wales and Victoria will ultimately enter upon a convention to finally exclude all Chinese inmigrants. It is a high combinate to the industry and third of these people, though not intended as such, to admit that restriction or exclusion is the only way of competing with them in business pursuits.

The annual rice crop of North Carolina, South Carolina and Louisiana, U. S., averages 80,000,000 pounds. The Carolina rice brings one halfa cent a pound more in market than the Louisiana rice, though, it is said, there is scarcely an appreciable difference between them. A larred of rough rice—165 pounds—finds a ready market in New Orleans at from \$3,50 to \$5.00, and the cost of getting it cleaned in the mills is about one cent a pound. In Louisiana, from 20 to 30 bushels of rice—a bushel of rough rice contains 44 pounds—can be grown on a care of high land without flooding, and much more, of course, on flooded lands. This is said to more profibale than cotton-growing in that state. In 1878, the total number of spindles in the United States was estimated at 105,000,000; the quantity of cotton consumed, are not deducted, was 698,000,000 pounds gross; and the product in cloth was 586,000,000 pounds or 2,617,000,000 yards. At a recent meeting of the American Fish Cultural Association in New York, Mr. G. S. Page can a say on "Animals Destructive to Wood Under Water," in which he said that the toroto narealize was the most destructive animal to intuber under water that is known. It is found all along the coasts of North and South America, and also on other coasts. It is in the shape of a worm, but has a head of hard shell made to resemble an auger, gouge and file intension in the control of the property yearly. The only thing that preserves imber against the attacks of this animal is an extract forcol attact of coal tar or gas tar in which there is a large per ceptum of capelic acid,

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