THE NEW YORK HERALD.

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ARRIVAL OF THE EMPIRE CITY.

Highly Interesting Intelligence from Cuba and Yucatan—Another Phase in the Slave Trade—Increase in the Spanish Squadron, &c., &c.

The steamship Empire City, Captain Windle, arrived yesterday morning from New Orleans and Havana. She left the latter place on the 29th ultimo, and brings us letters and papers to that date.

Our thanks are due to Purser Craig for late news.

Singularly enough, on the day we received our Havana news our Yucatan correspondence, embracing intelligence affecting Cuba, reached us; we therefore give the whole together.

OUR HAVANA CORRESPONDENCE.

HAVANA, July 29, 1853.

Arrival of the Spanish Squadron at Havana—More about the Slaveship Lady Suffolk—Who is her Owner?—Duplicity and Forgeries of the Spanish Officials in the Matter—Ravages of the Yellow Fever, Small Pox and Diarrhœa—Great Mortality among the Troops, &c., &c.

The Spanish squadron which sailed hence about a month ago on a cruise, have all got safe back again into harbor, "*gracias a Dios.*" Although several cargoes of slaves have been landed in the neighborhood of the late cruising grounds, I have not learned that the squadron has been more fortunate than their predecessors during the last fifteen years in falling in with and capturing any piratical slave vessels. To give you an idea of the expense incurred by this government in their naval department alone, I will give you a list of the ships of war now in this harbor, all first class vessels, and which, I assure you, make a very imposing appearance:—

Steam frigate Isabel Segundo, (guns)	14
Frigate Esperanza	44
" Perla	44
Brig Gallano	20
" Alcedo	20
" Scipion	18
" Nervion	18
Steamer Blasco de Garay (large guns)	6
" Don Antonio de Ulloa, do	6
" Pizarro, (large new guns)	6
" Neptune, do	4
" Conde de Benidite, do	4
Total guns	205

Besides those enumerated, there are two or three smaller vessels, the names of which I do not at this moment remember.

I understand that in consequence of it having come to the knowledge of our worthy acting Consul, Mr. Robertson, that the late Mexican Consul at this place, Buenaventuro Vivo, had inserted in the documents which he granted to the famous slaver, the Lady Suffolk, that he (Vivo) had granted said papers upon certificates given by the American Consul, Judge Sharkey. Mr. Robertson had addressed a very strong letter to the present Mexican Consul, Don Ramon Carvallo, requesting to be informed if it was true that reference was made in the documents furnished by Vivo to the Lady Suffolk to certain certificates purporting to have been given by Consul Sharkey, on the 13th of May last. Mr. Carvallo has replied—

That it is certain that reference is made to certificates received from Consul Sharkey, on the 13th of May, certifying that the ship Mary, or Lady Suffolk, then lying in the port of Cienfuegos, on the south coast of Cuba, was the property of a certain Mr. Henry West, of Boston, who had authorized the Captain Mr. Wm. Smith, to sell said vessel at Cienfuegos, but that said certificates could not be found in the archives of the consulate.

Of course they were less likely to be found in the American Consulate, from whence such documents never were issued; but that they, as well as Captain Wm. Smith, and the owner, Mr. Henry West, of Boston, were probably the creations of Mr. ex-Consul Vivo's inventive genius, or of some one in his office. The history of this man, Vivo, you have already had. Having succeeded in inducing Santa Anna to make him Minister to Spain, this ex-slave trading captain could not go upon his mission without implicating one of the purest men in the United States, Judge Sharkey, in the scandalous transaction. A person connected with Vivo's establishment has openly declared that the thing was done as follows:—

The pretended certificates from Consul Sharkey were false. Vivo returned here from Mexico, on board the British steamer, on the 8th of May; on the 13th he drew up the papers which were to enable the Lady Suffolk to navigate from Cienfuegos to Laguna de Terminos, but his nephew Joaquin Soler, a lad not eighteen years of age, signed the documents as "in absence of the Consul."

Don Julian Zulueta no longer retains lodgings in the Moro. Nothing has yet been heard of the six American sailors belonging to the Jasper, who were left at Cayo Cortez, by the three men who were sometime ago picked up in a boat at Cape San Antonio, and are now confined in the public jail of this city. It is to be hoped they have not been murdered. One hundred and forty slaves landed from the Lady Suffolk, and seized by order of the Captain General on the estate of Julian Zulueta, have been returned to that person. It having been proved to the satisfaction of His Excellency that they were not Bozales, *i. e.*, recently imported Africans, but had been in the island some time.

The cholera, yellow fever and small pox are making fearful ravages on the estates in the interior. The thousands of recently introduced Africans have brought with them a terrible kind of diarrhœa, which is carrying off vast numbers of victims, and rapidly extending its frightful progress through the island.

In Havana the troops are dying like rotten sheep. In some regiments of a thousand men, there are scarcely four hundred available, and all the hospitals are as full as they can hold. All sorts of ridiculous rumors are abroad as to a conspiracy having been detected among the creole doctors to poison the sick soldiers.

The truth is that the yellow fever has this year taken a very malignant form, and that as soon as the doctors succeed in removing the fever, the patient becomes seized with cholera, which carries him off in a few hours.

The quarrel between the Captain General and the editor Galiano, has been compromised.

HAVANA, July 29, 1853.

The Arrest of Zulueta, owner of the Lady Suffolk, a Sham—Another Cargo of Slaves Landed.

Precisely as it was predicted in the HERALD a few weeks ago, so it has turned out, the arrest and placing of Mr. Julian Zulueta, the owner of the slave ship Lady Suffolk, was all a sham, got up for the occasion of satisfying the British government that our immaculate Governor was doing his duty, and putting down the slave trade. The late act of returning to Mr. Zulueta the 172 negroes of the Lady Suffolk's cargo, which had been seized on his estate, the Alava, pretty clearly indicated that Zulueta's residence in the Moro was only temporary, and that as soon as the storm which was threatening in England blew over, he might return to his town residence whenever it pleased him to do so. Accordingly, yesterday, Don Julian Zulueta removed to his house in Havana, and about 11 A. M., held a levee of his friends, which was numerously attended by all the most notorious slave traders.

Several of the sailors belonging to a Spanish vessel which landed four hundred and fifty slaves four or five days ago at Batabano, (immediately opposite Havana, on the south coast,) were yesterday brought in here prisoners, as usual. After the negroes were safely put on shore, the slaver vessel and part of the crew were seized by the authorities. The slaves were conveyed by the public railway cars to an estate not three miles from Guines, where yet most of them are to be found. You shall have all the particulars in the course of a few days. *

News from Yucatan

OUR LAGUNA CORRESPONDENCE.

LAGUNA DE TERMINOS, Yucatan, July 16, 1853.

The Papers of the Lady Suffolk, and the Duty of Our Government in relation to them—Consul Vivo versus Judge Sharkey—The Lady Suffolk to be Judged.

By the schooner Mercedes, via Sisal and Havana, I hasten to transmit to you copies of the original documents furnished by order of the Mexican ex-Consul in Cuba, Buenaventura Vivo, to the pirate ship Lady Suffolk, alias Eclipse, alias Mary, alias Mariana, under which she navigated from Cienfuegos to this port. It will be unnecessary for me to call your attention to the infamous falsehood introduced into the bill of sale, wherein it is stated that on the 13th day of May last the United States Consul at Havana granted a certificate to the effect:

That the ship Lady Suffolk (or Mary) then lying in the harbor of Cienfuegos, was the lawful property of Mr. Henry West, of Boston, merchant, and that Mr. Wm. Smith, the master of said ship Mary, or Lady Suffolk, was duly authorized by the said owner Mr. West to sell said vessel.

The character of our Consul at Havana for uprightness of conduct is too well known to his countrymen to be for even a moment tarnished by the vile and slanderous statements of Mr. Buenaventura Vivo; but as the latter person has had the audacity to found his right to grant the papers which he furnished to the owners of the Lady Suffolk, and under which she sailed for Laguna, upon the certificate which he states he not only received from the American Consul at Havana, but the said certificate authorizing the sale or transfer of the Mary, alias Lady Suffolk, at Cienfuegos, to her Spanish purchasers, now exists in the archives of the Mexican Consulate at Havana, it will become imperative on the part of the government at Washington, as it will be the duty of Mr. Consul Sharkey, for his own sake, to demand that this certificate, which it is pretended was given by him, be produced, in order that it may be declared—what there can be no doubt it is—a vile and infamous slander.

The crew of this vessel, from the moment of their arrival here, never hesitated an instant in declaring that their ship was the famous Lady Suffolk; that they had landed upwards of 1,287 slaves at the Estenado de Cochinos, district of Cienfuegos, Island of Cuba; that their captain's name was Eugenio Vinas; that he, Vinas, landed with the greatest part of the crew to serve as an escort to conduct the slaves to an estate called the Alava, which belonged to a certain Don Julian Zulueta, who also was owner of the Mariana (Lady Suffolk) as well as the cargo of slaves, so that there is not the slightest doubt in my mind that there is as little truth in Consul Vivo's statement, that Judge Sharkey ever had anything to do with this infamous transaction, as that the Lady Suffolk, or Mary, had been commanded by a Captain Smith, or was ever owned by a Mr. Henry West, of Boston.

An order has just been received here from the supreme goverment, commanding that the Lady Suffolk be sent to Vera Cruz for adjudication. *

THE DOCUMENTS.

CONSULATE OF MEXICO AT HAVANA.

On the third day of the month of May, in the year of our Lord one thousand eight hundred and fifty three, personally appeared before me, Mr. Juan Gutierrez, a Mexican citizen, acting for and in the name of Mr. José Ruiz, also a Mexican citizen and resident, and said,

That having acquired, in the name of his principal, the property of the American ship Mary, anchored in the port of Cienfuegos, *as appears from an instrument in writing, transmitted on this day by the Consul of the United States of America, to the undersigned Mexican Consul, &c.*, he was desirous that he should obtain the necessary papers, duly authenticating his right and title.

Now, therefore, in presence of Mr. Juan Gutierrez, acting for and in the name of Mr. José Ruiz and Mr. William Smith, (captain,) first purchaser and second vendor of the American ship Mary, the following articles were agreed upon before me and the witnesses, whose names are hereinafter signed:—

Captain Smith, by virtue of the full power which he holds from Mr. Henry West, merchant, of the city of Boston, *and by virtue of competent authorization from his Consul in this Consulate*, sells to the Mexican captain, Mr. Juan Guderrez, agent of Mr. José Ruiz, the American ship Mary, anchored in the bay of Cienfuegos, with her masts, tackle, sails, anchors, chains, running rigging, smaller crafts, and other appurtenances, according to the inventory now presented by the said captain.

The ship aforesaid measures four hundred and ten tons, and her dimensions are, 120 feet keel, 130 beam, 17 feet hold, and 32 extreme breadth.

Captain Smith sells the aforesaid ship for the sum of sixteen thousand dollars, ($16,000) for which sum he acknowledges receipt in full, he having it now in his possession, and which said sum he acknowledges to have been paid to his complete satisfaction, and he therefore renounces all the rights which he had in and to the said ship, and he grants to the said purchaser, Mr. Juan Gutierrez, the fullest and completest acknowledgments of payment that may be conducive to his security, by virtue of which he abandons, divests, yields, and fully gives up the right of property which he has in the aforesaid vessel, the ship "Mary;" he grants, releases, and quit-claims the same, with all active, real and personal, useful, mixed, direct, and executory, to the aforesaid purchaser, Mr. Juan Gutierrez, acting as the lawful attorney of Mr. José Ruiz, of Mexico, that he may hold the said vessel, and sell, alien, and otherwise dispose of the same at his free will and choice, as his own property, acquired with a just and lawful title.

Mr. Juan Gutierrez, acting as the representative of Mr. José Ruiz, accepts the said sale, and therefore acknowledges that he has received the aforesaid ship, with all her apparel, and other appurtenances, set forth in the inventory.

In testimony whereof, the foregoing was duly read to Captain Smith, through an interpreter, Mr. Fernando Ruiz, and he declared the same to be correct, and that the contents of this instrument were true and certain; whereupon both parties hereto signed in the presence of Ramon Diaz, Cipriano Munoza and Fernando Elias.

[Seal.] signed Juan Gutierrez, William Smith, Fernando Ruiz, Cipriano Munoza, Fernando Elias.

Before me. JOAQUIN SOLER.

The foregoing is a faithful copy of the original instrument, entered in the 44th page of book A, of the records of this Consulate, under my charge. In testimony whereof, and in order that the same may fully appear when necessary, I have signed these presents, on this thirteenth day of the month of May, one thousand eight hundred and fifty-three.

The Consul being absent,

(Signed,) JOAQUIN SOLER.

CONSULATE OF MEXICO AT HAVANA.

By virtue of the petition presented to this Consulate by Mr. Juan Gutierrez, Captain of the ship Mariana, requesting that there be granted to the vessel under his command letters of naturalization, she being the property of Mr. José Ruiz, a subject and native citizen of the republic, as appears from the instrument of sale made at this Consulate, under date May 13th inst., Mr. Valentine Conigo, a merchant of this place, personally appeared on this thirteenth day of May, one thousand eight hundred and fifty-three, and before me, Consul, and the witnesses whose names are hereunto subscribed, said, that in order to comply with the laws, he bound his present, past and future property, giving two-thirds the amount of the security of two-thirds of the purchase money of the ship Mariana, he being consequently responsible to that amount for the improper use that might be made of the provisional patent of naturalization, solicited by Captain Juan Gutierrez, in order to allow his sailing with the said vessel under the Mexican flag.

In testimony whereof, he signs these presents at the city of Havana, at the office of the Mexican Consulate, on the day above mentioned, in presence of the witnesses—Ramon Diaz, Cipriano Munoza, and Don Fernando Elias.

[Signed.] RAMON DIAZ
CIPRIANO MUNOZA,
FERNANDO ELIAS.

Before me. JOAN SOLER.

The foregoing document is a true copy of the original instrument, to be found on the 47th page of book A of Records of this Mexican Consulate, and under my charge. In testimony whereof, and in order that the same may more fully appear when necessary, I have upon request, given these presents on this thirteenth day of May, one thousand eight hundred and fifty three.

The Consul being absent,

(Signed,) JOAQUIN SOLER.

CONSULATE OF MEXICO, AT HAVANA.

The Mexican Consul at Havana, declares that Mr. Juan Gutierrez, a Mexican subject, by profession a seaman, and the authorized agent of Mr. José Ruiz, a merchant of Mexico, has, duly and in conformity to the laws of the republic, proven that he has acquired for his principal the property of the ship called the Mariana, and that, desiring that she should carry the national flag, he requested that I should confer upon him the requisite letters of naturalization and patent of nationalization: Now I declare that the aforesaid vessel, the ship Mariana, of the burthen of four hundred and ten (410) tons, and of the following dimensions, keel net 120 feet, beam 130, extreme breadth 32, hold 17, has a right to navigate under the Mexican flag, and consequently I grant the present passport to the said Juan Gutierrez, merchant captain, in order that, with the said ship Mariana, he may leave the port of Cienfuegos, where she is now anchored, and proceed to the Laguna de Terminos, for which voyage only this present provisional patent shall be valid, it being incumbent upon him there to present himself to the competent authorities, that they may deliver to him the necessary national patent.

Therefore, I do beg and entreat of all the civil, military and naval officers and functionaries, the commanders of vessels of war, or other officers, both national and foreign, unto whom these presents may come, to consider the said vessel as Mexican, and consequently not to place any impediment in the way of her pursuing her voyage, but on the contrary to facilitate the same, lending her aid and succor, should the same be asked of them.

This present provisional patent, valid for this voyage only, has been given at the office of the Mexican Consulate, at the city of Havana, on the thirteenth day of May, 1853.

The Consul being absent,

(Signed) JOAQUIN SOLER.

CONSULATE OF MEXICO, AT HAVANA.

Pevisional list of the crew of the national ship Mariana, 410 tons burthen, and belonging to Mr. Jose Ruiz, a merchant of Mexico; Juan Gutierrez, master, anchored in the port of Cienfuegos, to set sail on a voyage to the Laguna de Terminos, with the hands, whose names are hereinafter set forth.

[Here follow the names of the officers and crew, which we omit.]

I grant leave unto the said captain, with his vessel and crew aforesaid, to set sail for the Puerto de Laguna, to which place only this provisional roll will be used by him; and he shall there provide himself with all the papers required by our laws.

Said captain has declared that he has on board the following passengers:—

[We omit the names.]

Given at Havana, this thirteenth day of May, 1853.

Consul being absent,

[Seal.] (Signed) JOAQUIN SOLER.

Manifest of the balance of provisions taken in by Captain of Mexican ship Mariana, bound from the port of Cienfuegos to Laguna de Terminos, to wit:—

14 barrels beef, 8 do. pork; 5 do. biscuit; 3 do. lard; 8 do. vinegar; 3 do. mackerel; 5 do. brandy (de cana, or cane brandy); 5 do. biscuit, damaged; 1 barrel beer; ½ do. salt; ¼ do. flour, damaged; 1 box sugar; ½ do. cheese; 1 do. tea; 4 do. cod, damaged; 3 do. cider; ½ do. Rhenish wine; 3 bags red beans; 3 do. white do.; 3 do. rice; 2 barrels fresh biscuit; 20 bags barley, damaged; 2 do. salt pork; 2 do. coffee; 3 kegs butter; 2 do. olives; 2 do. salt fish; 4 packages smoked meat; ½ bag almonds; 8 garrafones wine; 10 bottles wine (Muscatel); 16 do. cherry brandy; 6 do. syrup; 2 jars olive oil; 10 boxes matches, 300 water provisions; ballast; 25 muskets.

Laguna de Terminos, May 31, 1853

[Seal.] (Signed) JUAN GUTIERREZ.

THE SPANISH SQUADRON AT HAVANA.

[From the Diario de la Marina, July 27.]

Two new steamships in one single day have come into our port, devoted to the sole purpose of protecting, defending, and guarding Cuba. Eleven vessels of war already lie in our waters, from the haughty Isabella II to the other no less useful ones recently constructed for the service of our coasts. Another, on the point of completion, is about completing the dozen. When to these are added the other vessels of different kinds (whose beautiful evolutions, a few days since, were a subject of general admiration) our New Orleans periodical friend, with whom we had a discussion on the subject but a few days since may have his mind conclusively made up as to whether we are, or are not, as hyperbolical and exaggerated as he would appear to imagine. The naval forces of Spain in the American waters are as respectable for their number as they are for the excellent discipline, the fine armament, and the ardor of their officers and men.

We did not err then, when we contemplated with profound contempt the joy of those few wretches who dreamed that Spain saw her power diminish with the loss of the Pizarro. Did they fear or hate the Pizarro? or did they entertain both these feelings against that vessel? For, here they have her anew, riding our own bay, and born from her own ashes, bearing the same burthen, the same artillery, the same Spanish hearts on board, and the same proud banner of Castile floating over her and protecting her with its glorious folds. There is but one feature wanting, and that is the material part, the planks and keel of the old Pizarro an object of sacred veneration for us, as being linked in our minds with the remembrance of piracy humbled and chastised. But the name of the venerated victor still survives and with it all its efforts, heightened by remembrance and example to stimulate it to greater efforts that it may occupy an equal rank among the noble defenders of our country and our queen.

NEWS BY TELEGRAPH.

From Washington.

THE BELGIAN MISSION—MOVEMENTS OF THE SPANISH MINISTER—RETURN OF MESSRS. MARCY AND CUSHING—ASTOUNDING DEVELOPEMENTS EXPECTED, ETC.

WASHINGTON, August 3, 1853.

Don Calderon de la Barca, the Minister from Spain, left here for New York to-day.

Secretary Marcy returns to Washington on Saturday.

Secretary McClelland's visit to New York, it is rumored, is touching an astounding scheme of gigantic frauds just discovered, and kept a profound secret by the government. He cannot well return before Saturday night.

The whig convention at Bladensburg, to day nomisated Augustus R. Sellers, of Calvert county, for Congress.

Attorney General Cushing has returned.

There is no truth in the statement telegraphed to the evening papers in New York last week, that Walter Fearn has been appointed Minister to Belgium. No appointment to that court has been made.

State Elections.

KENTUCKY.

LOUISVILLE, August 3, 1853.

First District—Linn Boyd's (dem.) majority for Congress is 1,500.

Eighth District—The majority for J. C. Breckenridge (dem.) is 580.

Tenth District—The probabilities to day are that Stanton, dem., is elected to Congress over Hodge, whig, by a small majority. The vote is very close.

A storm South prevents the receipt of despatches from other districts.

MISSOURI.

ST. LOUIS, August 3, 1853.

Jackson, anti Benton, author of the famous Jackson resolutions, is elected to Congress in the Third district.

Caruthers, whig, is elected to Congress in the Seventh district.

Edward Bates is elected Judge of the Land Court.

From British Guiana.

COOLIE LABORERS—THE VENEZUELAN REVOLUTION, ETC.

BOSTON, August 3, 1853.

Papers have been received here from Georgetown, British Guiana, to July 14.

They report that there was considerable dissatisfaction at the result of the importation of Chinese Coolies, who were very quarrelsome. The bark Appollone had arrived from Calcutta, with one hundred and ninety Coolies; twenty others had died on the passage. Four hundred more Chinese Coolies had been contracted for, and were expected. They were said to be the off-scouring of the Chinese nation.

An article in one of the papers declares that if Cuba is allowed to continue to receive slaves, the British West Indies cannot compete with her in the production of sugar, &c.

The same papers have details of the Venezuelan revolution, of which the Province of Cumana seems to be the head quarters. They had formed a provisional government, and had taken measures for a convention of the disaffected provinces, to form a confederation. General Thaddeo, a general of Monagas, was marching against them, at the head of 3,000 men.

The Monagas family had sent 7,000 doubloons to Trinidad for safekeeping.

The *Trinidadian* thinks that the Venezuelans are unfit to be free, and that an American rifle corps had better take possession of the country and govern it.

State Teachers' Convention.

SECOND DAY.

ROCHESTER, August 3, 1853.

The Convention of the State Teachers' Association reassembled to-day.

A lecture was read by Mr. Riddle, of New York, upon motives to mental culture.

A debate took place upon a proposition to separate the office of Superintendent of Schools from that of Secretary of State. Speeches were made by Mr. Randall, the Secretary of State, and Messrs. Coburn, Woolworth Weller, and Valentine—all in favor of the plan—and the resolution was adopted.

In the afternoon session a very able lecture was read by Professor Upson, of Hamilton College, on practical education, after which the order of business was taken up, and a discussion on county associations followed.

This evening the association attends a levee given by A. H. Brewster, Esq.

From Boston.

THE DANISH SLOOP-OF-WAR SAGA—FATAL RAILROAD ACCIDENT—LOSS OF THE BRIG ELIZABETH FELTON.

BOSTON, August 3, 1853.

The Danish sloop-of-war Saga sailed from here at noon to-day, for New York.

This evening, as the express train from the north upon the Lowell Railroad was passing Woburn, it ran over an unknown man, who was lying upon the track, cutting him to pieces.

Loss of the Brig Elizabeth Felton.

BOSTON, August 3 1853.

The brig Elizabeth Felton, Rogers, from Boston May 14, for San Francisco, was abandoned at sea June 28, (no latitude or longitude given,) leaking badly. The captain and crew left in two boats, and after four days hard suffering, arrived at Surinam, from whence, the captain writes, he would leave for Boston by the first vessel. The E. F. was a good vessel, of 161 tons, built at Essex, in 1847, and owned in this city.

Non-Arrival of the Niagara.

HALIFAX, August 3—Midnight.

Up to the present moment there are no signs of the steamer Niagara. She is now in her twelfth day out.

Departure of the Europa.

BOSTON, August 3, 1853.

The royal mail steamship Europa, Captain Shannon, sailed at noon to-day, with twenty passengers for Liverpool and thirty-two for Halifax. Among the former were Lady Ellesmere and daughter.

The Europa took out $283,000 in gold ingots, and $1,500 in English silver coin.

Southern Mail Failure.

BALTIMORE, August 3, 1853.

We have no mail south of Charleston to night. Two New Orleans mails are now due.

Markets.

ALBANY, August 3, 1853.

Receipts of the past twenty-four hours:—Flour, 8,500 bbls.; wheat, 14,000 bushels; corn, 39,000 do.; oats, 11,000 do. Flour has been in good, steady demand for the East and home trade; sales of 2,000 bbls. at $5 a $5 12 for State, and $4 87 a $5 12 for common and mixed western. Wheat firm; good inquiry for milling purposes. Corn in good request, at better prices; 10,000 bushels sold at 71c. for unsound and 72c. a 75c for sound mixed western. Oats steady; sales of 15,000 bushels at 44c. a 45½c. Whiskey sold at 26½c. for prison.

THE CRYSTAL PALACE.

Progress of the Exhibition—Description of Articles.

The clinking of "hammers closing rivets up" still continues at the Crystal Palace, but with daily increasing indication that their work will soon be ended. The machine arcade will be ready for visiters in a few days, and will add much to the other attractions.

Many of the packages from the ship Centaur, which we have before noticed as being received in the building, were opened yesterday, presenting new gems of art to associate with the already numerous collection. A marble bust of Pope Pius IX., by Tenerani, is among the new contributions, and is much admired, especially by the Catholic visiters. Also, a group called "The Lovers going to the Fountain," is a work of much merit, which was yesterday placed in the west nave. By no means the least interesting object, added from the Centaur, is a large marble dish by Lazzarini, from Benvenuto Celliui, Florence. This artistic work is set upon a pedestal four feet high, highly carved with clusters of grapes, &c. In the centre of the dish is a likeness of Cosmos, one of the dukes of Florence, and around the centre are numerous allegorical groups and landscapes. The dish is about two feet in diameter, and may be considered as one of the finest specimens of the fine arts on exhibition. These articles spoken of, all belong to the Italian department, which excels all others in sculpture and painting. While all the civilized nations of the world are represented in the American Industrial Exhibition, at the same time many isolated sects and principalities contribute their mite to the great apotheosis of labor. The Waldensians have sent some specimens of silk, which are worthy the attention of all who sympathize with these people in their struggles against ages of persecution. The silk is in the skein, and is from Genicourd, in the Protestant valley of Piedmont, somewhat celebrated for producing the most superior silk, which forms a great staple of the country.

A group of statuary, representing an eagle carrying away a child from its sleeping mother, has been lately placed in the west nave, around which daily gather crowds of admirers. This work has many admirers, although it is not entirely faultless. The body of the mother and her face, upon which is the calmness of "balmy sleep," is wrought with much excellence. But the head of the child is disproportionate with its body, and the eagle is not large enough to impress one with a belief of his power to carry off his load. The claws of the bird are firmly set in the flesh of the babe, and the countenance of the child, indicating fear and pain, is eminently superior. The face of the crying infant powerfully excites the sympathy of the spectator, who actually forgets, for a while, that he gazes only upon marble, and feels a thrill of horror in beholding the peril expressed. This work is by Auguste Lechesne, of Paris, and was much broken during its transit to this country; weeks have been consumed in repairing it, and its appearance now is free from any mutilation.

Another very beautiful contribution exhibited during the last few days, is a hose cart made in Philadelphia, but owned, we understand, in New York. In richness it far surpasses anything of the kind ever manufactured, and with firemen in particular it is a theme of praise. It is composed of great quantities of the precious metals, and it cost $5,750. The side plates and boxes are massive silver, ornamented with fine gilt edging. All the iron work is silver plated. On the front box, in gilt, on a groundwork of silver, is Neptune and his sea coursers rising from the ocean; on each side, in *bas-relief*, is a representation of Night and Morning, from the original, by Thorwaldsen. Upon this box, dolphins of gilt support Neptune and Amphitrite, the two holding a golden scroll, on which are the words "Neptune Hose." The lanterns on either side are of pure silver, supported by nereids in gilt. Upon the rear box, in large silver raised letters, is written "Neptune." The inner part of the side plates is elegant papier mache work, illustrative of various ocean scenes. The outside of the plates are highly decorated with dolphins, shells, and implements of navigation. The support of the side beam is an oval silver reflector, in which is a dancing nymph, supported by two of the horses of Neptune. The speaking trumpet and two torch boxes are massive silver, beautifully embossed. Two miniature firemen's hats are hung upon two flag staffs, and all are placed in a glass case in the north nave.

We were told that, in a few days, in the agricultural department, there will be shown a plough, the identical one which was used by Roger Sherman. This will be a very interesting relic.

ADMISSIONS AND RECEIPTS.

Number of single admissions	$3,282
Do. season tickets	1,227
Amount of cash received	1,597

THE UNITED STATES COAST SURVEY.

THE ELECTROTYPING PROCESS.

Among the most valuable contributions in a scientific point of view, are the instruments employed in the United States Coast Survey. These occupy a place to the right of the Forty-second street entrance. As very few of the thousands of visiters to the Palace understand their use, or are even acquainted with their names, we intend giving a description of each from time to time. Meanwhile we present the following description of the process of electrotyping, to our readers. It is a very important art, as will be seen from this account:—

The Coast Survey exhibits three sets of electrotype plates—the larger is 42x38 inches; the medium 38x27, and the smaller 22x18; these are the general sizes of the Coast Survey charts. Each set contains the original plate, or that produced by the engravers, the electrotype mould taken from the original, and the electrotype duplicate of the original taken from the mould. This duplicate is so faithful a *fac simile* of the original, that the one cannot be distinguished from the other; the most attentive examination fails to detect a difference. This exactness of copy obtains in no other art of copying forms; even the common printing type, simple as their forms are, differ somewhat from the steel punches used to make the matrices; but when we reflect what large and delicately wrought surfaces are exactly duplicated by the electrotype, the beauty of the art in comparison with all other plastic operations becomes conspicuous. The largest plates of the Coast Survey present a surface of over ten square feet, so elaborately wrought that a magnifying glass is required for viewing the minutiæ before the real extent and difficulty of the work becomes apparent. Such a plate requires a set of skilful engravers from three to five years in its production; and yet, when completed, it can be duplicated in the laboratory of the survey in three short days, so perfectly that the artist who has labored over it daily for years cannot discover which is the plate he produced.

The practical result of this exact multiplication of forms is, that the engraver having once done his work, an infinity of prints may be obtained, and these all of the first class, or new impressions, as the printers style those taken before the plate begins to show the wear of printing. The plate being gradually worn out by the printing, the impressions decrease in value until they no longer represent the design of the artist. Hence large engravings must be costly, and the number limited, unless the expense of engraving is often incurred. This circumstance early occurred to Prof. Bache as limiting the diffusion and perpetuation of the useful results of the survey, and he accordingly caused experimental trials of the electrotype to be made. But notwithstanding the éclat which attended the new art, the repetition of the best European processes gave but unsatisfactory results; it was found that the electrotype plate was so deficient in mechanical virtues as to be of but little use, and very often would be so fragile, in whole or in parts, as to break like a cake of sandstone; but worse than all these defects, deposited copper was apt to adhere so firmly to the original plate as to wholly spoil it, converting a monument of patience, perseverance and artistic skill into a sightless mass of copper; and the known or recommended means for preventing the adhesion, defective of they were, obliterated the finest parts of the engraving.

No cure for these casualties appeared in the office of the Coast Survey, except from a radical examination of the principles of the art, and a thorough application of the sciences involved to the principles. This has yielded even unhoped for results. The forming of large electrotypes in the Coast Survey laboratory is now as certain a process as the moulding of bricks.

The first grand result obtained by the Coast Survey was an infallible process for causing the electrotype to separate from the original plate. This in principle was obtained by attending to a more accurate demarkation of the forces which determine the two plates. That sleight of the black-smith, by which he breaks a bar of steel by a mere tap of the hammer, after making a fine notch in it, is at the basis of the process used for preventing the adhesion. On experimenting on the adhesion of air, wax, &c., (the substances previously proposed for hindering adhesion,) to metals, it was found that it was too near akin to metallic cohesion to permit thin films of those substances to intervene between the plates, for they actually acted as cements, instead of diminishing the cohesion.

The operation for preventing adhesion now performed, is entirely chemical, and consequently far more delicate than the mechanical operations of coating the plate with air, wax, powders, &c. The plate to be electrotyped, is made chemically clean, and washed with an alcoholic solution of iodine, and then exposed, for near an hour, to sunlight; the solar rays cause a portion of the iodine to rise in vapor, forming an extremely low atmosphere of that gas on the plate; the plate being now introduced into the electrotyping connections, the newly formed copper combines with the iodine vapor; thus both plates are faced with a thin film of iodid, which admits of the least force determining a line of cleavage along the faces.

The chemical action of the iodine, though causing the plates to separate like the laminæ of mica, does not in the least mar the polish of the faces. Although the face must be admitted to be corroded, when chemically considered, yet the depth of this corrosion is trifling in a mechanical view; the iodine solution used for preparing the plate is very weak, containing only one grain of the halogen to 20,000 grains (over three pints) of alcohol, and Mr. Mathiot, who has the laboratory in charge, has calculated that the film of iodid is far less than the ten-thousandth part of a millionth part of an inch, in thickness. This process has invariably given good results at the Coast Survey office; and the copying obtained by it is far more perfect than that obtained by former methods; for in defiance of the most dexterous manipulation an excess of wax will choke some of the finer lines, and when an air film is used, bubbles are very liable to be retained in the cutting. The beauty and delicacy of the views on the charts of the survey, now at the fair, show that the copying is perfect. The chemical process has the advantage, also, in point of time; the largest plate can be prepared in an hour, while the mechanical methods require several days.

The other improvements introduced by the Coast Survey are in the metallic virtues of the electrotopes, and the time, economy and facility of conducting the operations. The objections which beset the earlier operations in electro metallurgy were softness and friability in the metal, with scantiness and unevenness in the deposition. Specimens of electro copper are exhibited fully equal to the best fire-made metal in tenacity, hardness and elasticity. The plates are now cast uniformly one eighth of an inch in thickness, and work so well compared with the originals that the first duplicate of the largest plate exhibited, printed near two thousand copies without showing signs of wear. Yet the original, from the fineness of the work, was estimated as capable of furnishing only eight hundred copies.

A chief feature in the electro-metallurgic operations of the coast survey, is the use of hot electrolytes for the reduction of copper; this, while greatly improving the quality of the work, has much reduced the time, so that which was formerly the work of a month can now be done in a few days.

It has been frequently proposed by persons not thoroughly conversant with this subject, to use steel plates instead of copper, as the steel will print a greater number of copies. But this is only putting the evil off in point of time for the steel plate will eventually wear out. But it is not only the getting of many duplicates that gives the electrotype the preference; it is brought to bear directly in the production of the engraved plate, and greatly reduces the time for getting out large engravings. As but one artist can work at a plate at a time, the time for producing a plate must be proportionate to its size. To abridge this time, the plate is now cut in four or more sections, and distributed among as many artists. When the sections are done the electrotypist places them in conjunction, and takes an entire cast, as though they were but one. It can readily be seen from this that there need no longer be a limit to the amount of work on one sheet, and that maps of our cities need no longer be pictures of the past, but representations of things which are.

SWISS DEPARTMENT.

WOODEN WARE.

The Swiss make a very creditable show in their embroidery, watches, and wooden carvings. Some very interesting curiosities, composed of wood, show great proficiency and patience in carving in this material. The wood of which these articles are manufactured is a dwarf tree, of the cedar species, indigenous on the mountains of Switzerland. It is remarkable that the same wood has two distinct colors, side by side, which give these carvings their beautiful appearance. Among the carvings are models of Swiss cottages, of this kind of wood, showing great fineness and skill in their manufacture. Also, salad forks and spoons, carved in the most exquisite style, ornamented with grapes, vines and dolphins, &c.; paper folders, tipped with the chamois horn, and plates, equally embellished, are on exhibition. Several beautiful work-boxes, highly embellished, call forth much praise from the ladies. A carving of not the least interest in the collection, is a little statuary, representing a meeting between a Swiss hunter and a milkmaid; while the enthusiastic hunter is patting the rosy cheeks of his fair companion, the dog is lapping in the milk pail. Large centre tables, fans, and other articles of a lady's toilet, show the industry of the Swiss in this kind of work.

JEWELRY AND WATCHES.

By far the finest case of jewelry on exhibition, is that from the manufactory of Auguste Dubertre, Geneva. This city has a universal reputation for its superiority in making watches, and the articles exhibited show that this reputation is well founded. Watches no larger than a gold dollar, in perfect order, with all the chains, springs and wheels of the best watches, are in the side of port monnaies, card cases, eye glasses, bracelets and other jewelry. Particular notice might be properly called to a gold bracelet shaped like a coiled serpent, blue enamelled, with ruby eyes, and having a large opal set around with diamonds on its head. The mouth of the serpent is made to open with a spring, and discloses a small watch within. Nothing more elegant was ever before exhibited in this country. Various other articles in this case, too numerous to be especially noticed, dazzle the eyes of all beholders with their numerous jewels. There are many cases of jewelry from different manufacturers of Switzerland, all of them displaying superb specimens.

WASHINGTON NATIONAL MONUMENT.

CONTRIBUTIONS.

Cash on hand	$771 13
Contributions for this day	57 62
Total	$828 75

Terrible Catastrophe on the Belvidere and Delaware Railroad.

TEN MEN KILLED—ONE FATALLY, AND SEVERAL SERIOUSLY INJURED.

[From the Lambertville (N. J.) Diarist Extra, Aug. 3.]

It befalls us this morning to record the most awful calamity that has occurred in this vicinity.

Last evening a train of platform cars, conveying the laboring men of the Belvidere and Delaware Railroad Company, and about one hundred of those assisting in the repairs of the Pennsylvania Canal, to their homes, was thrown from the track at Bull's Island, nine miles above here, and the fatal result announced above ensued.

The train consisted of ten cars, and there were on board two hundred or more men. Tidings of the catastrophe were brought to Lambertville as soon as possible, and a locomotive was immediately fired up and departed for the scene of the disaster, having on board Drs. Lilly, Keen, and Reily, of Lambertville, and Dr. Foulke, of New Hope, some of the officers of the company, and a sufficient number of citizens to assist in the duties expected to be required.

On arriving at the ground, the heart-rending spectacle of nine dead bodies, and a number wounded, lying upon the cars, surrounded by the friends who were with them, was presented.

The particulars, as nearly as we could ascertain them, were as follows:—

The train was backing down the road, and when at Bull's