YORKTOWN'S VICTORY.

Enthusiastic Preliminary Celebration of Cornwallis' Surrender.

A GRAND PROCESSION.

Rear Admiral Wyman and General Getty Lead the Blues and Grays.

PATRIOTIC ADDRESSES.

Proposed Industrial Exhibition and Great Festivity in 1881.

[BY TELEGRAPH TO THE HERALD.]

YORKTOWN, Va., Oct. 23, 1879.

The morning was cloudy and threatening, with an easterly breeze, accompanied by occasional light, drizzling rains, but notwithstanding this slight drawback the preliminary centennial celebration here opened auspiciously. It began like an April day—half sunshine, half showers, the atmosphere balmy. By noon it cleared off, became very warm, and on the whole the day was pleasant. At an early hour the people from the surrounding counties on the peninsula began to throng into town. A great many came in vehicles drawn by oxen which, harnessed to spring wagons, trotted along in a most spirited fashion. By eight o'clock there were several thousand persons present, though as yet none of the numerous excursion steamers were in sight. The first and main objects of interest to the country folk were the war ships comprising the North Atlantic squadron, which swung easily at anchor on the York River, their prows pointing up the stream. The bluffs and remnants of old Revolutionary earthworks on the north side of the town overlooking the river were soon dotted with people gazing eagerly at the fleet. At eight o'clock sharp they witnessed the ceremony of dressing the ships which was performed as if by magic. In the twinkling of an eye the national flag floated from the head of every mast in the fleet, and the band on the flagship struck up the "Star-Spangled Banner." The Powhatan, flying the pennant of Rear Admiral Weyman, was an object of special interest. The Kearsarge, on account of her battle with the cruiser Alabama, also came in for a share of attention. Besides these there were the Marion, Saratoga and Portsmouth. This preliminary ceremony of the fleet over the crowds next turned their attention to the town, the thoroughfares of which were by this time covered with lunch counters, snack stands and open air barrooms. But little notice was taken by the rural population of the Revolutionary relics in which the town abounds. The miscellaneous edibles and drinkables proved more attractive until the grand barbecue prepared by the county was served up.

LANDING OF THE NAVAL OFFICERS AND MARINES.

About nine o'clock an order was issued from the flagship for the marines from each ship to "stand by" to land together by signal on the arrival of the Pamilico with the troops from Fortress Monroe, and report to General G. W. Getty, their commanding officer for the day. The Pamilico made her landing here at a little before midday, and the troops, about two hundred and fifty in number, together with the band from the Fort, were at once disembarked. The marines of the fleet, numbering something over a hundred, were landed at half-past eleven, and fell in on the shore to receive General Getty and his command. The ceremonies of the day were opened at twelve o'clock by a national salute of twenty-one guns from the flagship Powhatan, followed immediately afterward by a torpedo salvo of thirteen explosions in honor of the thirteen original States whose independence the surrender at Yorktown, ninety-eight years ago, assured. This salute was fired from the beach, where the necessary electric battery and appliances had been placed, the whole being managed and directed by Lieutenant Allan G. Powell, of the Powhatan. At half-past twelve o'clock Rear Admiral Robert H. Wyman, the commander-in-chief, accompanied by his staff, comprising Captain David B. Harmony, commander of the Powhatan; Flag Lieutenant George M. Totten and Lieutenant William P. Potter, secretary, left the flagship and proceeded to the shore. They were followed immediately by the commanding officers of the other vessels—Commander Francis M. Bunce, of the Marion; Commander Henry F. Picking, of the Kearsarge; Commander Robley D. Evans, of the Saratoga, and Lieutenant Commander A. S. Crowinshield, of the Portsmouth. As the sailors of the fleet were not landed, the officers not on duty on board ship were allowed to witness the "fructions" as spectators, the only requirement being that they should wear their uniforms in honor of the day. At a quarter before one o'clock the Powhatan saluted with seventeen guns in honor of the Governors present.

THE NOTABLES PRESENT.

There was considerable disappointment expressed when it was found that the full complement of Governors did not arrive. Governor Halliday was the only executive who put in an appearance, arriving shortly after twelve o'clock, and fell in for the full compliment of a Governor's salute of nineteen guns. Among the distinguished personages present were Colonel Peyton, Dr. J. A. Paxton and Mr. Booth, late of the Philadelphia Exposition; Theodore Fittler, of Philadelphia; Adjutant General Latta, Brigadier General G. L. Snowden, Colonel Armstrong and Dr. Reed, representing Governor Hoyt, of Pennsylvania; Professor Eli Charlier, of the French Historical Society (representing the French Republic), from New York city. Mr. Clyde, of the Clyde Steamship line, came here in his steam yacht, which was beautifully decorated with the flags of all nations, and having on board a batch of Northern journalists and other visitors. Colonel Lincoln represented the Governor of Massachusetts and Colonel Cameron Governor Jarvis, of North Carolina. These, with the Admiral of the fleet, General Getty, from Fortress Monroe, and their representative staff, in addition to the local committee previously mentioned in the HERALD'S despatches, were all the notables present.

A GRAND PROCESSION.

At about half-past twelve o'clock, the landing of all the troops and visitors being effected, a procession was formed at the wharves, which was led by Governor Holliday, the gentlemen of the committee having in charge the celebration, those representing the executives of other States and Admiral Wyman and General Getty and staffs. Following came the fleet battalion of marines, headed by the band of the flagship Powhatan, the Old Dominion Guards of Portsmouth, the Norfolk Light Artillery Blues and the Norfolk City Guards, with bands. Next in line were the Wise Light Infantry, of this county, and then came the Richmond Blues, of Richmond, Captain G. S. Wise, and Company C of the First Virginia regiment, Captain Spotswood, forming as a battalion under the command of Colonel John Purcell, of the First Virginia regiment, who was assisted by Adjutant L. Sterne and Lieutenant Ellett, of the same regiment, with their regimental band. Then came the five artillery companies which form the garrison at Fort Monroe, under command of Major Randolph, and preceded by their splendid post band. The Peninsula Guards of Hampton, and a corps of cadets from Norfolk, with the band of the soldiers at that place, closed the line of the military. The grangers from the counties of Norfolk, Nansemond, Princess Anne and Elizabeth City, numbering about one thousand men, followed by other civic societies, completed the procession, which was about one mile in length, and made a magnificent appearance as it progressed through the town. The grand stand, placed on a mound of the old Revolutionary earthworks, and facing the northwest at the head of McClellan avenue, was occupied to its utmost capacity by the prominent personages present, with the Reception Committee. To the right the battalion of the regular army was placed in company column; resting on them and facing the stand were the marines; next came the Norfolk Light Artillery Blues; on their left the Peninsula Guards, of Hampton, and on the extreme left the Portsmouth Light Infantry. There being no room for the remainder of the troops in the line surrounding the stand, they were allowed to stack arms, break ranks and mingle with the spectators, who covered almost the entire space of several acres in front of the stand. A careful estimate placed the number on the ground during the delivery of the orations at ten thousand people.

CEREMONIES AT THE GRAND STAND.

After an appropriate prayer by the Rev. Dr. O. E. Herrick, Post Chaplain, United States Army, Dr. Powers delivered a short address of welcome, in which he briefly referred to the object of the celebration, and then introduced Governor Holliday, of Virginia, who welcomed the military in the following speech:—

GOVERNOR HOLLIDAY'S ADDRESS OF WELCOME.

MY COUNTRYMEN AND COUNTRYWOMEN, FROM WHATEVER PART OF THE REPUBLIC YOU MAY COME; SOLDIERS AND SAILORS OF THE UNITED STATES AND CITIZEN SOLDIERS, ONE AND ALL—In the name of the people of Virginia, I bid you welcome to the scene which witnessed the close of the Revolution! The conflict of arms in effect ended here—the war between the colonies and Great Britain was brought to a termination and a new era dawned upon the continent. We have come together to inaugurate proceedings looking to the centennial celebration of that event. Surely an occasion of profound interest. Stepping from vigorous youth into manhood, assuming the responsibilities of independence, the confederation took its place among the nations to test its virtue and strength. A victory does not always mark an epoch; oftimes it is fruitless. There may be enough perhaps of the destruction of life and property, and the supremacy of arms may be complete—one side or the other going down for a while or forever—but no great change is effected in the current of the world's history, and no new spirit begins its career for the happiness or the misery of the human race. The thoughtful student can see no results from its triumphs, and can trace no lasting effects from its frightful work. Not so with others. The numbers engaged may be small, the carnage may in comparison scarcely moisten the ground where the armies stood, and yet the victory may signalize the close of a long war, and bring on the reign of a prosperous peace; or date the birth of an age which is to put influences into action that are destined to tell upon the future generation of men. Of the latter, was the battle of Hastings. Of both, was the surrender of Lord Cornwallis upon the spot where we are now gathered. While consummate military skill and genius were displayed, in comparison there were not many men engaged; there was not much loss of life; there was not much property destroyed or surrendered to the victor; but it closed the long war of the Revolution, emancipated thirteen colonies from their bond to the British Empire, and inaugurated a Power, which now, after the lapse of a century, though grown into one of the most gigantic of nations, has scarcely begun to make its full impress upon the world's destiny.

FITTING COMMEMORATION OF A GREAT VICTORY.

It is becoming and right that we should honor this important event and celebrate its annual return; it is more so that we should make provision for its centennial anniversary. This is Virginia's day, and she has invited her sister States and the federal authorities to be her guests. Two years hence all of the States will be hosts on this spot, as a common heritage, with France their great ally, and will invite the world to witness how they value the virtue and the valor of the men who won the victory and how they appreciate its wonderful results. The thirteen little colonies have become a republic, almost covering the continent, still growing with unequalled rapidity and destined to fill a larger space in history than any nation that has hitherto appeared upon its pages. Washed by the waters of either ocean, stretching from the Arctic to the tropics, its resources are boundless; now, at the head in material development, it has reached that period in its growth, when it is ready to begin its contest for supremacy in science, art and literature. But above all other blessings that a people can have, it holds fast to the traditions of a glorious ancestry—men who laid in the noblest virtues the broad and deep foundations of the constitutional freedom we now enjoy. May their genius survive to the remotest generations, making us a high-minded, brave and honest people, guarding us against internal distraction by sweet memories and cheering hopes and binding us together, as with hooks of steel, against external foes. In the name of the people of Virginia and from my own heart I bid you welcome, whatever your calling or pursuits or from whatever land you may come. I bid you welcome while we recur to the history of our forefathers, filled with everything that is calculated to elevate and inspire and to the fruition of their high achievements. I bid you welcome to the contemplation of a growth unequalled by any people who have lived before us in whatever tends to make a nation powerful and great. I bid you welcome to a view of the future, and pray that we may have the faith and strength to fulfil its vast promises. One and all, I bid you all hail! welcome to Yorktown.

General Talliaferro, the orator of the day, was next introduced. This gentleman is a native of Gloster county, and played a prominent part in the late war. He is a fluent speaker, and delivered a stirring oration, taking up the struggle for independence in its earliest stages and following them carefully until the final scenes upon the plains of Yorktown, which he vividly portrayed. He paid a high tribute to the courage and heroism of the Continental army, while not forgetting to render full justice to the noble conduct of the gallant officers and soldiers of the French allies.

MR. HOPE'S ADDRESS.

Mr. James Barron Hope then followed in an eloquent address. He opened by a reference to the two hundred and fiftieth anniversary of the settlement of Jamestown, celebrated twenty-two years ago, and to a later occasion when the statue of the "Father of his Country" was unveiled on the Capitol grounds at Richmond. Then as now the popular heart was moved by memories of the past. He continued:—

MY COUNTRYMEN—We may read over here to-day some of the inscriptions on the foundation stone of the Republic, and trace their origin. That foundation stone was blasted out from the quarries of Revolution at Lexington and Bunker Hill; it was dyed by the blood of patriots and heroes, and was laid upon this spot nearly a century ago, not with a ceremonial display of wine and oil and the trowel of the Master Mason, but by the sword of the victor and amid the carnage of battle. The men who achieved that stupendous work were born of a civilization unknown to the Old World, alien to its traditions and hostile to the arrogant exactions of the *jus divinum*. A brief inquiry, then, my fellow citizens, into the growth and development of that civilization; a glance at the influences which gave strength and symmetry to the characters of our ancestors; a consideration of the causes which gave a liberal elevation to their theories of government; in one word, a few reflections on their education—the education of the wilderness—may not be out of place to-day.

John Goode, member of Congress from this district, was the next speaker. In a few telling remarks he introduced a series of resolutions, recommending that a committee named be appointed to inaugurate a movement for raising the necessary funds among the patriotic citizens of the Union to repair the William and Mary's College, and that they report progress on the 19th of October, 1881. The resolutions were unanimously adopted, and Hugh Blair Grigsby, of Richmond, appointed chairman.

MASSACHUSETTS, PENNSYLVANIA AND NORTH CAROLINA.

Colonel Lincoln, who represented the Governor of Massachusetts, was next introduced. He said that the last time he visited Yorktown he was a badly scared man. (Laughter.) But he was glad to meet the people of Virginia to-day. Virginia and Massachusetts, in the old days, had stood side by side in the field and in the councils of the nation, and it was a worthy son of Massachusetts, General Anthony Wayne, who had held Cornwallis in check while the troops of General Washington were concentrating for the investment of Yorktown. He was glad to meet so many representative Virginians, and trusted that the two States would hereafter go hand in hand in perfecting the Union.

General Latta, Adjutant General of Pennsylvania, who represented that State, followed in a brief address. He said that Pennsylvania also claimed some credit for the results achieved on this spot. Did not one of her most honored citizens, Robert Morris, of Philadelphia, advance the sum of $1,200,000 to further this great end? He then alluded to the great resources of the two and their similarity and trusted that peace and unity would forever unite them.

Colonel Staples, of North Carolina, represented that State. He claimed that she had the honor of issuing the first declaration of independence and that the first white female ever born in America had the honor of being born on her soil. They did not capture Lord Cornwallis, but they gave him all the tar they could while he was within her borders.

FRANCE'S REPRESENTATIVE.

Professor Charlier, representing the French government in New York, was next introduced. He said that ninety-eight years ago, when the French soldiers were on this spot, he did not know whether they spoke good English, but he was satisfied they did good fighting. (Cheers.) At that time this country had some three million inhabitants and now it has over forty millions and has far outstripped France itself, but if the French had had a republican government and a man like George Washington at its head things might have been different. He hoped that in 1881, when the citizens and soldiers of the Republic had been assembled here for the centennial celebration—when the college had been resuscitated, France, through the Governor of the State and the President of the United States, would be invited to participate in that celebration, and that the two sister republics will go hand in hand together, until the governments of Europe shall join them in one grand republic.

Major Beamish, of Her Majesty's service, who has been in the country four months travelling, was introduced and made an amusing address. He did not want to rob them of their honors, which had been nicely won, as both the British and Americans win them at the point of the bayonet. (Cheers.) He hoped that British and American bayonets would never again be crossed in strife, but be combined together against a common foe. He had met nothing but the greatest kindness and hospitality in his sojourn here, and had found from personal experience that his former impressions of the country had undergone a radical change.

The orators were enthusiastically applauded throughout, particularly Captain Hope, whose allusions to William and Mary College elicited cheers from the crowd.

THE CELEBRATION OF 1881.

Upon further investigation I find that the scheme to make the Yorktown centennial celebration in 1881 a great national and international event has not only been well considered, but almost matured. It had its origin in Philadelphia some months ago upon the occasion of the visit of one of the present committeemen of this initial celebration to that city, and is said to have been suggested by a distinguished gentleman who was interested in the national centennial of 1876. Among its originators the plan is deemed reasonable and highly practicable, and so far it has been admirably carried out. A committee, consisting of one from each of the thirteen States, of which Governor Holliday is to be the chairman, will be formed to make proper arrangements for the celebration under a resolution passed at the meeting in Philadelphia. The next move in the programme will be made at the next session of the Virginia Legislature to incorporate a company to be known as the "Yorktown Centennial Association," which will have charge of the local organization of the affair. The charter to be asked for will confer upon the company power to consult with the National Committee for the purpose of designating the location of suitable centennial buildings at Yorktown in which to give an exhibition of the products, manufactures and arts of the United States and other countries, and to further have control of all local arrangements in connection with the proposed centennial. National aid is then to be asked for, without which the entire scheme will prove a failure. The amount required is much more than that indicated in my despatches of yesterday. I am credibly informed that the representation in Congress from this district will introduce a bill asking for the appropriation of half a million to commemorate the crowning glory of the Revolution at Yorktown. It is argued that this bill should receive as favorable consideration by Congress as did that giving a million and a half to the Philadelphia Exhibition, from the payment of which the Centennial Commission is now seeking relief. Perhaps, it is suggested, this relief would be more speedily granted to Philadelphia by the donation of the required amount to Yorktown on the ground that one good turn deserves another. It is proposed that the celebration shall occupy a week, and the exhibition to extend a term of three months, commencing October 19, 1881. In this connection and as an indication of the action, the following resolutions, preceded by a lengthy patriotic preamble, were adopted by the meeting to-day:—

THE RESOLUTIONS.

Resolved, That this meeting, consisting of citizens from all sections of the United States and by special representations from the thirteen original States, assembled for the purpose of taking preliminary steps toward a fit and appropriate observance of the centennial anniversary of the surrender of Yorktown, heartily approve and indorse the recent action of the Governors of the thirteen original States at their meeting in Philadelphia on the occasion of the ninety-eighth anniversary of the event.

Resolved, second, That in conjunction with them we do commend to the people of the United States such a celebration of the centennial anniversary of the surrender of Cornwallis at Yorktown as shall bear the historical significance of the event and the present greatness of the nation.

Resolved, third, That we call upon the Congress of the United States to give practical effect to the resolution offered by Edward Randolph, of Virginia, on the 29th of October, 1781, and passed by the Continental Congress—viz.:—"Resolved, That the United States in Congress assembled will cause to be erected at Yorktown, in Virginia, a marble column, adorned with emblems of the alliance between the United States and his Most High Christian Majesty and inscribed with a succinct narration of the surrender of Earl Cornwallis to His Excellency General Washington, Commander-in-Chief of the combined forces of America and France, and to His Excellency the Count de Rochambeau, commander of the military troops of his Most Christian Majesty in America, and His Excellency the Count de Grasse, commander in-chief of the naval army of France in the Chesapeake."

Resolved, fourth, That John Goode, representative of that Congressional district of Virginia which embraces within its bounds the historic place made famous by the event of 19th October, 1781, is hereby requested to bring the subject before the national legislature at its next session and to urge the prompt and speedy fulfilment of the nation's pledge, made nearly a century ago.

A FEAST FOR THE TROOPS.

On a level plateau opposite the Nelson House were erected three rough wooden tables, about fifty yards in length, each laden with the barbecue, or rather free lunch material, provided especially for the military guests of Yorktown. Sentinels stood around these tables to keep back any but the soldiers, for which there was but little occasion, as the civilian crowd were amply provided by the hotels, lunch stands and the baskets of provisions they carried with them. The soldiers, both regulars and volunteers, however, did ample justice to the feast, and the scene was singularly animated, to say the least. As one looked down the long tables and saw the hungry sons of Mars fall to and cause the roast pigs, sheep, quarters of beef, great dishes of fish and oysters and accompaniments to disappear, it can truly be said that Yorktown did nobly on the occasion, and every visitor went away satisfied, at least as to appetite.

FIRE IN A MONTREAL SUBURB.

FORTY HOUSES DESTROYED IN A FRENCH QUARTER—GREAT MISERY ENTAILED UPON POOR FAMILIES.

[BY TELEGRAPH TO THE HERALD.]

MONTREAL, Oct. 23, 1879.

At four o'clock this morning there occurred in the village of St. Jean-Baptiste, on the north side of Montreal, a most disastrous conflagration. It broke out in the stable of Joseph Renaud. Four dwellings were in flames when the village steam engine arrived. The wind was increasing and the flames threatened to destroy the whole village. Men, women and children, half dressed, ran about in every direction, conveying their goods to places of safety, and the scene was indeed a pitiful one. The fire, which took place on the St. Dominique side of the village, soon made its way to Hypolite street, and, burning northward in the teeth of the wind, crept to Rachel street. The Montreal fire brigade came none too soon to save the village. Had it not been for their arrival it is hard to say whether the flames would have stopped short of the St. Lawrence River, taking a great part of Montreal on the way. At about half-past four the walls of Renaud's place, a large brick tenement, tumbled in with a crash, and from that time one after another the rest of the houses fell, until, at half-past five, twenty houses were in ruins. The firemen worked hard and were aided by a tremendous shower of rain. At seven o'clock the fire was brought under control, and at eight scarcely a vestige remained of forty buildings that had been standing on the previous evening. Happily no person was fatally injured, although several narrow escapes from falling chimneys and falling walls are reported.

SOME OF THE LOSERS.

Among the losers are John Leggo, Pierre Goyette, André Pepin, J. Patrie, A. Paquette, P. Matin, Pierre Pepin, F. Pichette, C. Chalifoux, J. Lauzon, F. Guilbault, T. l'Esperance, D. Dube, J. Gauvreau, Alexis Remo, J. Duquette, Francis Lamouche, Gédéon Despaty, Bazile Despaty, Zotique Despaty, Rémi Wood, Joseph Goulin, François Debien, A. Durocher, F. F. Labelle, Widow Charreties, P. Delorme, A. Gauvreau and J. Muir. These are the only names which could be gathered, the confusion was so great.

At ten o'clock this morning about one hundred and fifty of the homeless were collected near Fletcher's field awaiting arrangements for their comfort. Drenched to the skin, houseless and homeless, theirs seemed indeed a hard lot. The loss is small in money, being placed at $60,000, and the insurance companies do not lose an eighth of the sum, from which may be inferred the amount of misery entailed upon the burned out villagers.

ON TRIAL FOR MURDER.

FATAL QUARREL BY TWO YOUNG MEN—DETAILS OF THE KILLING AND THE TESTIMONY EDUCED.

SCRANTON, Pa., Oct. 23, 1879.

The exciting trial of Thomas Barrett for the murder of Thomas Callahan, whom he shot and killed at a place called Boone Hill, on the outskirts of Scranton, the 1st of June last, has crowded the court room here to-day with an anxious audience. Barrett is a young man of average appearance, dark complexion, rather boyish looking and is about twenty-four years of age. The man he killed, although only eighteen years old at the time, was a giant in stature and weighed about one hundred and eighty pounds.

DETAILS OF THE KILLING.

On the 31st of May they were together with several other young men about nine o'clock in the evening and began fooling. Callahan caught Barrett by the ear, remarking that he could wring it off. He hurt Barrett and a quarrel ensued, during which Callahan whipped his antagonist, whom he kicked several times. Barrett then came to the city, had his wounds dressed and appealed to a police officer to protect him as far as his boarding house, which lay a short distance from where Callahan lived. The officer did not accompany him, but placed him in the care of two young men going that way. They escorted him home, and, about four hours after his quarrel with Callahan, Barrett, still smarting under the indignity of the beating he had received, obtained a revolver and started out in search of his opponent. He met Callahan with his companions on the roadside at one o'clock in the morning of the 1st of June, and, after a short parley, fired at his adversary. The ball entered Callahan's forehead right over the left eye, and he died a few hours later.

TESTIMONY ON THE TRIAL.

Callahan's father, in the course of his testimony, said that on the morning of the murder he was called out of bed by a tapping at his window and somebody told him his son had been killed on the road. He found him dying and brought him home. Dr. Travers, County Coroner, exhibited the ball with which the deed was done. He found it beside the skull.

The defence is that the killing was done for self-protection; that Callahan was powerful and merciless and Barrett's life was in danger. The case is still on, and excites great interest. A host of witnesses will be examined on both sides, and the trial is conducted by able counsel.

AFTER THE VERDICT.

People in Newark are still discussing the Blair trial and the verdict of acquittal. Colonel Abeel, the Essex County Prosecutor or District Attorney, was asked his opinion yesterday. He said:—"So far as I have the power to challenge, not one of the Blair jury shall ever sit on another criminal case. Upon the evidence in the case no other verdict should have been rendered but murder in the second degree." The Colonel spoke with great feeling and earnestness. One of the judges of the Essex county courts (not one of those who tried the case, however) declared yesterday that the very least the jury ought to have done was to return a verdict of manslaughter. That would have let Blair off with a fine or light imprisonment, in the discretion of the Court. A bulletin, which caused something of a sensation in Market street, near the Court House, was seen yesterday by a HERALD reporter, together with the announcement of the verdict. There was presented a figure of "Jersey Justice"—a female with bandaged eyes, a sword and scales—the scales balanced by a pistol and a pile of money. Over the figure were the inscriptions:—"Jersey Justice," "*Vivat Justitia!*" "*Perent Mundus!*"

A bologna sausage maker's advertisement was pasted below.

INDICTED FOR MANSLAUGHTER.

The Grand Jury of Queens county yesterday presented an indictment against Lena Vogelsang, of Hempstead, for manslaughter in the first degree for the killing of Esther Sines, of Hempstead, her next door neighbor, during a quarrel over the pasturage of a cow. Mrs. Vogelsang drew a pistol and shot her dead. She is in jail, and will not be tried until the last week in November.

SCIENTIFIC NICETIES.

Microscopic Tests of Arsenic in the Hayden Trial.

DEMONSTRATIONS BY AN EXPERT.

Identifying the Poison Found in Mary Stannard's Stomach.

NEW HAVEN, Oct. 23, 1879.

In the Hayden murder trial another day has been occupied with strictly expert testimony. Professor Dana, of Yale College, has given a mass of testimony which, for care and preciseness of detail, is praised in the highest terms by the scientific gentlemen who were present. Recognizing the fact that the defence will cross-examine severely, he has evidently aimed to make his story complete in every particular, and he fortified himself well against possible slips of memory by referring constantly to memorandum books. His testimony is not only of great scientific interest, but of importance as supporting the count in the indictment charging Hayden with having administered to the girl the ninety grains of arsenic found in her stomach.

The attendance was large and there were full representations from Yale College and medical and other professional circles of this city.

POWERS OF THE MICROSCOPE.

Professor Dana repeated his statement of yesterday that by the microscope he could detect the difference between the particles of different lots of manufactured arsenic and also between ground and unground arsenic. In the latter, although the particles might be as small, they would be perfect crystals, while in the former most of the crystals would be broken. When visiting the Tavestock works last summer Professor Dana obtained from as many packages ten samples of arsenic ready for sale, prepared at different periods, extending from 1870 to 1879. A smile passed over the faces of some in the court room when the Professor, in making this statement, carefully avoided a rock upon which the defence nearly succeeded in wrecking Professor Johnson yesterday. They had tried to get some admission that he might have intermingled in some way the contents of some of the packages of arsenic sent him as an expert. Dana, apprehending some such question by the defence, stated with great particularity that in getting his samples he opened but one package at a time, took the sample, and wrapped both package and sample before proceeding to the next. Continuing, he said:—

"In examining these samples they were put on microscopic slides and placed under a microscope magnifying them two hundred times. There is a readily distinguishable difference between the particles of some of them, although there was a general similarity—that is, they agreed in containing a considerable proportion, never less than one-half, of minute but perfect octohedron crystals, and containing also irregular broken fragments, varying in size. I was confident by these experiments that I could separate one from the other easily, depending mainly on the distinctions between them furnished by the proportion of crystals with crushed particles, respectively. I was convinced that there was a real and distinguishable difference between the products of a manufactory at different times. I also received from the Tavestock Works last April two packages, and in January last a package from Dr. E. R. Squib, of Brooklyn, N. Y. This was marked 'Drayton' (it came from the Tavestock Works), and resembled in its general nature samples obtained by me from the works."

THEORY AND OBSERVATION.

"Why should there be any difference in the crystals or particles?"

"I can give my theory. I know they exist, but it would take a year of experimenting to obtain a perfect demonstration."

Mr. Watrous (for the defence)—I must object to this. What he saw is one thing. His theory cannot be regarded as good evidence. Let us have the results of the examination of the specimens he has had, and not attempt to go into the causes of those results.

Judge Harrison (for the State)—If mere speculation, the State will claim nothing. But we can show that he is an expert. Now, Professor Dana, did you observe at Tavestock that some of the specimens furnished octohedral crystals?

"Yes."

"Did others furnish crushed masses?

"Yes."

"Will the size of the crystals depend upon the rapidity with which they are formed?"

"Yes, it is a well received fact in chemistry that crystals, whether formed like those of sugar from a solution or from vapors produced by heat, as in the case of white arsenic, the size of the crystals will depend largely upon the rapidity of formation. And I have often observed myself in making mineralogical tests for arsenic that when I regulated the temperature so that the crystals were formed slowly they were larger than when formed very rapidly. I do not state that this is the only cause determining the size, but it is a very prominent one. At Tavestock the arsenic I saw ground was mostly coarse powder, with some lumps of crystallized matter. The crystals varied in size.

Judge Harrison (in a gratified tone)—Now, Mr. Watrous, these answers cover the points to which you objected. I have gained my object of showing Professor Dana to be an expert.

Mr. Watrous—Well, well, you needn't chuckle over it.

Judge Harrison—Now, Professor Dana, would arsenic from several manufactories all have distinctive characteristics?

"I think it probable, but I do not regard my observations as sufficiently extended to prove it fully. I have in my possession, however, four samples—the 'Dayton,' 'Garland,' 'Welsh' and 'Dragon' brands. These are so dissimilar that I could separate a hundred samples by the microscope, instantly and without possibility of mistake. The 'Garland' or glass arsenic comes in lumps, and not being obtained by crystallization would show no crystals after being pulverized. I have examined a sample and it has no crystals, it presents the appearance of dust."

THE M'KEE ARSENIC.

"Could you tell, under the microscope, whether ground arsenic came from large crystals wholly pulverized?"

"I would not be willing to swear positively, but from the examination of other samples in which there were present a considerable number of complete unbroken crystals I would be perfectly certain that these last were not produced from the grinding of such lump arsenic as I saw manufactured at the Garland works. In December, 1878, I received from Professor White, of this city, a small quantity of arsenic; January 16, 1879, a second sample, and two days later a third. Professor Johnson also delivered other samples to me, all of which were labelled, including five grains of the 'Hayden barn arsenic' and some 'McKee arsenic,' so called because purchased at McKee's drug store in Middletown, by Deputy Sheriff Hull."

The label on this has the usual sign of poison, the death head and cross bones, and it presents this appearance:—

POISON!	
Cut of skull and cross bones.	ARSENIC—ANTIDOTE, Lime water in copious draughts, Emetics of Sulphide of Zinc, Flaxseed Tea, Infusion of Slippery Elm.
MCKEE, DRUGGIST, 154 Main street, Middletown, Ct.	

Mr. Watrous—We may all need some of these antidotes if we have much more poison brought into this room.

Judge Harrison—The State's experts will be happy to look after you.

Mr. Watrous (quickly)—I have a very high respect for these gentlemen personally, but as experts—well, I prefer not to fall into their hands.

Professor Dana, continuing—I also received the "Colgrove" package of arsenic. (This was purchased at the store where Hayden bought arsenic on the day of the murder.) I tested one lot of the "barn" arsenic by the microscope and found it arsenic. The McKee package contained arsenic by the same test, also by a chemical test, and the white powders received from Professor White were also arsenic.

Witness also admitted receiving the fourteen packages purchased by Edmund Zacher and thirty-odd by Deputy Sheriff Stevens, acting for the prosecution, and also that he purchased a large number of samples himself and received further lots from Dr. Squibb, of Brooklyn, N. Y.; Dr. Hotchkiss, of New Haven, and Dr. Foster, of Cornwall, England. Witness also purchased twenty-three samples while in England. Altogether there were 110 packages.

"Lots 11 and 12 were purchased in New Haven, one taken from the top of the jar and the other from the bottom. There was no difference between them discernible by the microscope."

The object of this was to offset a probable claim by the defence that the State could not fully establish the similarity of the lots purchased by Hayden on the day of the murder and by Colgrove twenty days later, both at the same store. The reason would be that as Colgrove's package came from the bottom of the jar it might be from some other lot than that from which Hayden's came.

NEARING A DECISIVE POINT.

"The microscope shows that of the hundred or more samples all appear to be arsenic excepting five. These are fine white powders, undistinguishable particles, including one from Dr. Squibb, Brooklyn, and two from New Haven drug stores. In my examinations I used Professor Brush's microscope—I do not know of what make—of a magnifying power of 200 diameters. I prepared 180 slides, and have them all. For convenience I have given special names to the slides prepared from certain lots—the 'barn,' the 'Colgrove,' the 'McKee' and the 'stomach' arsenics. I prepared twenty microscopic slides of the 'barn' and fourteen of the 'Colgrove.'"

Witness produced several card boards, about twelve by eighteen inches, covered with neatly arranged microscopic slides. These are of glass, two inches long by three-quarters in width, and on the centre of each is a small whitish circle containing the arsenic. The witness now entered upon the telling part of his testimony.

"Have you examined and compared the 'barn arsenic' and the Colgrove arsenic?"

"Yes, sir. And I find so many and striking differences that I have no hesitation in saying that they could not have come from the same source."

"If you knew that the Colgrove arsenic came from a certain jar in Tyler's drug store and that the ounce bought by Hayden on the day of the murder came from the same jar, and Hayden told you that the arsenic found in his barn was the same ounce, what would you say?"

Mr. Watrous—I object.

Chief Justice Park—He had better tell just what he knows.

Mr. Jones (for the defence)—We propose to show to the Court that——

Judge Harrison (interrupting)—There is no question before the Court, for I withdraw the question that I asked.

Mr. Jones—Mr. Harrison, you can't stop my mouth that way when I am addressing the Court. I wish to say this:—That I do not think it is right that the witness should be asked those questions now. The State should first put on the druggist, Tyler (who has purposely been kept back, I believe), to show that the Colgrove arsenic and the arsenic bought by Hayden did really come from the same original package.

Mr. Harrison—We have had Mr. Tyler here, but he couldn't remain, and we will call him later. We can prove by him that the two lots did come from the same original two-pound package.

THE COLGROVE AND "BARN" SAMPLES CONTRASTED.

Judge Harrison (to witness)—Please describe the characteristics respectively of the "barn" and "Colgrove" arsenics.

Professor Dana—I will first describe the Colgrove arsenic. It consists of crystals and also irregular fragments, showing no trace of crystalline structure. I have estimated as carefully as possible the relative proportion between the distinct crystals and the irregular fragments. I find, basing my results upon the whole number of slides prepared (fourteen), that it consists about one-third of distinct crystals. I find, as I examine one portion of a slide (a twenty-fifth of an inch on the circle), that this proportion varies somewhat—sometimes only one-quarter of the whole being distinct crystals. But the proportion was never as great as one-half of the whole. As to the size of the crystals, by far the greater proportion lie between 1-1000th and 1-500th of an inch across, taking the maximum diameter. More than four-fifths of the crystals lie between these limits. On examining by reflected light I noted the want of perfect lustre or reflecting power. Some of the irregular fragments were larger than the crystals. There was also a large quantity of minute fragments, bearing the same relations to the crystals as gravel to cobble stone. These are the characteristics of the Colgrove arsenic.

After recess Professor Dana resumed his testimony:—

I will now describe the "barn" arsenic. It is composed almost exclusively of regular octohedron crystals, which I find largely composing the mass—fully nine-tenths, and on no slide less than three-fourths. The crystals lie between 1-1000th and 1-2000th of an inch in diameter, and many are smaller than this lowest limit; some a little larger than the upper limit—say as large as 1-800th—and very rarely an occasional large crystal exceeding 1-500th. On the part of a slide covered by the microscope there are about four hundred objects in view, and among them I have found only four or five of the large crystals. The surfaces of the crystals are uniformly smooth and give good reflections when exposed to light. The irregular fragments form one-tenth usually, and never more than one-quarter of the objects visible. They are generally less than 1-500th of an inch in their longest direction, but an occasional lump is of a very considerable size. In addition to the lumps of measurable size there are some minute fragments, which I mentioned in the "Colgrove" arsenic as dust. The small quantity is explained by the fact that the proportion of broken fragments which went through the mill is so small. These features are all that distinguish the "barn" from the "Colgrove" arsenic. The differences are:—

First—As to number of crystals as compared to the number of irregular fragments. In the "Colgrove" the crystals make up less than one half of the objects; in the "barn" they make up three-fourths.

Second—The crystals in the "barn" arsenic are much more minute than in the "Colgrove," whose crystals are three or four times larger.

Third—The crystals in the "Colgrove" are dull surfaced; in the "barn" arsenic, brilliant, so that when both are examined entirely pure, laid on a clean glass, they are very different in lustre.

Fourth—The points I make are that the lumps in the "Colgrove" make up never less than half the material; in the other, only a quarter. Again, there is in the "Colgrove" a much greater proportion of minute fragments.

THE "STOMACH" ARSENIC.

I have mounted one sample of the "barn" and one of the "stomach" arsenic from the murdered girl's stomach, and I do not base my conclusions upon observations which might be made with those two slides to-day. Since the surfaces have been for some time unprotected I cannot swear that the objects present are there to-day——

Mr. Jones (interrupting)—Upon each of the two?

Professor Dana (continuing)—Yes. I cannot say they are absolutely the same as when I mounted them. I mention this point because these two slides are now in the collection with the others and to avoid any pointless or unnecessary questions in the future. (This sharp hit at the counsel for the defence was greeted with suppressed laughter all through the court room.) I have compared slides of the stomach arsenic with the "Colgrove" slide and find the characteristics alike, with two exceptions. And these are due to the peculiar conditions to which the "stomach" arsenic was exposed—the solvent action of some liquids upon the arsenic. The "stomach" arsenic had a slightly yellowish tinge and offensive odor. There is one difference which does not belong to the white arsenic remaining, due, I believe, to some chemical action. That difference is the presence of an occasional opaque fragment of a light yellow color, which I believe to be the yellow sulphides of arsenic. These were very rare. The differences between the "stomach" arsenic and common white arsenic are:—

First—The almost entire absence of dust like fragments.

Second—That while the surfaces of the "Colgrove" arsenic are smooth, those in the "stomach" arsenic have a series of parallel lines, and those along any one edge parallel with that edge. They meet the lines of an adjacent edge, forming a series of sharp angular points. There are also other triangular markings, appearing as depressions on the surface, as shown by this model. (Model, octohedral, and about four inches across, made of wood and paper, exhibited.) These triangles are sometimes up side down, and all of them resemble markings described by various authors, as produced by the slow, solvent action of a liquid. They are described by Darnel, an English author, in the *Quarterly Journal of Science*, 1816. Other descri