TRANSIT OF VENUS.

The American Expeditions in Asia.

NEWS FROM NAGASAKI AND TOKIO.

The Grand Event Witnessed with Flattering Results.

The Sites and Labors of the Observers in Japan.

IMPERIAL COMPLIMENTS TO OUR SCIENTISTS

The Theories of the Sun's Distance Reviewed and Explained.

NAGASAKI, Dec. 7, 1874.

Of the three American parties in the Northern Hemisphere one was directed to occupy such station in Japan, upon the line of telegraph, as gave best promise of fair weather. For the latter purpose the commission obtained meteorological data from several stations. The chances seemed nearly balanced, although it was evident that the northern stations, say as far as Hakodadi, were the less favorably situated. Moreover, if the other considerations were equal, it was important to occupy a station whence direct telegraph communication could be had with Wladivostok, and with Shanghai, Hong Kong, Singapore, Melbourne, &c. With this purpose in view the chief of the party had discretion allowed him whether to occupy Nagasaki, where the cables are landed, or some point more favorably situated, on account of weather, where the telegraph could connect with the cable. Coming into the field a month later than he had expected, the choice was cramped, and Nagasaki chosen. Stations on the great inland sea of Japan were reported as blessed with more good weather, but no reliable data could be obtained. From his experience in experimenting at great elevations in the Sierra Nevada of California for astronomical purposes Professor Davidson was anxious to reach a station nearly 10,000 feet above the sea. Such elevations are not known to exist in Southwestern Japan, and even where mountains of 3,000 or 4,000 feet elevation exist it would require a season and a large party to cut roads thereto.

Nagasaki is situated on a low contracted spot in the northeastern part of the bay, which is about four miles long, north and south, and half a mile in width, with fine, even bottom and good holding ground for shipping. It is on the route between Yokohama and Shanghai. The surrounding country is tossed up into sharp, abrupt hill-peaks, ranging from 500 to nearly 2,000 feet elevation. The latter very steep and covered with a heavy growth of chapparal.

The American party selected a narrow, smooth-topped ridge of 850 feet elevation, one mile south of the town, and employed several hundred coolies to open a road to the summit, where a space was made for the placing of the different instruments. As this station was a good distance from the telegraph cable office, a second station for telegraph longitude work was established near the cable line and the work commenced with Wladivostok early in November, in order that Professor Hall might leave there immediately after the 9th and not run any extra

RISK OF BEING FROZEN IN

until next May. This telegraph work was satisfactorily finished in about ten days, through the great kindness of Mr. Thomas Russell, the manager of this Danish line, and of Mr. Carl Nielson, the electrician of the company. After they had examined the special apparatus of the party, Professor Davidson was allowed to place the instruments directly in the line, and thus avoid the personal error which necessarily existed in the Atlantic cable work, where the flash of the galvanometer was noted by eye and hand. In this cable work to Wladivostok the clock did its own work. From Wladivostok a line of telegraph runs through Siberia to St. Petersburg, along which are strung twenty-seven Russian transit of Venus parties. They will determine the difference of longitude between St. Petersburg and Wladivostok, and thus Nagasaki becomes connected for longitude with Europe and America. After the telegraph longitudes were finished this telegraph longitude station and the transit of Venus station were connected geodetically.

The outfit of the different American parties is as identical as can be made by skilled workmen, although some of the parties have additional instruments, furnished by themselves or other persons. Judging from the outfit the American Commissioner's place more reliance upon the photographic results than upon the purely astronomical observations.

NAMES OF THE NAGASAKI OBSERVERS.

The organization of the American party here is as follows:—

Professor George Davidson, United States Coast Survey, Chief Astronomer, in charge of Transit of Venus Expedition.

O. H. Tittmann, United States Coast Survey, First Assistant Astronomer.

W. S. Edwards, United States Coast Survey, Second Assistant Astronomer.

S. R. Seibert, Chief Photographer, from the United States Treasury Department.

H. Ellerton Lodge, civil engineer, Boston, First Assistant Photographer.

F. B. Williams, Boston, Second Assistant Photographer.

Mr. Uyeno, of Nagasaki, Third Assistant Photographer.

This party is, in a sense, a Coast Survey party, and the Californians claim it as belonging to their coast, because Professor Davidson has been engaged on the survey of the Pacific coast for twenty-five years, and is thoroughly identified therewith. Messrs. Tittmann and Edwards are also attached to the Pacific Coast Survey. After the completion of the work for which they specially came out the party will be dispersed. Mr. Davidson, with his wife and two sons; Messrs. Seibert, Lodge and Williams continue westward, the first under especial instructions of the government. Messrs. Tittmann and Edwards return to California for their regular duties.

FRIENDLY AID FROM JAPANESE SCIENTISTS.

With this party the Japanese have sent several of the brightest young officers of the navy, and Captain Yanagi, Chief of the Bureau of Hydrography and esteemed one of their most learned men, visited Professor Davidson to study the instruments and methods. Lieutenant Otomo, Midshipman Isono, of the navy, and Mr. T. Magome, of the Educational Department, joined the party at Tokei in October. In December Professor David Murray, Chief Councillor of the Educational Department, and Mr. Hatekayama, Director of the Imperial College, joined the party at Nagasaki, the former to assist in the work. All these officers have been directed to make special reports to the Emperor and their departments.

During their stay in Japan the party has received every attention and kindness from the authorities in all the departments and from the people at large. The use of the telegraph line from Nagasaki to Tokei was placed at the service of Professor Davidson for scientific purposes, and he proposes to determine the difference of longitude between the two cities by telegraph and thus place Tokei in longitude connection with the capitals of Europe and America.

Special permission was given to the party to pass through any part of the Empire, but the time at their disposal prevented its being utilized.

DESCRIPTION OF THE SCIENTIFIC APPARATUS.

Inasmuch as the astronomical and the entire scientific world are deeply interested in the nature and object of the expeditions it may not be uninteresting to speak of the mechanical implements to be made use of in the prosecution of the work. In the astronomical work proper the party has a

TRANSIT INSTRUMENT

for the determination of clock corrections and for latitude; an object glass, two and a half inches diameter, with a prism for total reflection about twenty inches from the object glass, by which means the image is directed through one of the transit axis pivots. This is an old idea rejuvenated; it has certain advantages, but more disadvantages. This instrument also plays a principal part in the placing of the photographic telescope, as will be explained.

THE EQUATORIAL INSTRUMENT

has an object glass of five inches diameter, made by Alvan Clark & Sons, Cambridgeport. It was made only and solely for this and the transit of 1882, and, therefore, lacks the means of fine adjustment of position, but will accomplish what it was intended for. With this equatorial is the double image micrometer of Airy, by means of which micrometric measures of the separation of the cusps of the sun can be made while Venus is on the limb of the sun at ingress and egress: also measures of the distance apart of the borders of the sun and of Venus after she has entered a short distance; these to be repeated at egress in the reverse order. During the passage of the planet over the sun's disk Professor Davidson will make micrometric measures of the diameter of Venus to study the problem of irradiation. He has also placed in position a coast survey meridian instrument by which to observe the meridian passages of the limbs of the sun and of Venus, and in the Commission transit meridian observations will be made for the difference of declination of the sun's and Venus' upper limbs, which will be separated about 3 min. 40 sec. at apparent noon. To utilize every member of his party a small equatorial of three inches will be used by the first assistant astronomer for the determination of contacts.

The different chronometers and clock are connected by telegraph lines and the epochs of the different phenomena recorded on chronograph sheets, just as the ordinary star transits are. This method is in great favor with all young observers, and for certain work is a great relief. But experienced observers have more faith in their "eye and ear" observations than in the "eye and hand."

In order that this centennial appearance of Venus on the sun might not take the observers unprepared for certain phenomena expected to appear, an artificial Venus was set up on Winder's building, in Washington, and the observers had some practice thereon from the Naval Observatory. At this Nagasaki station Venus in several shapes, as she will appear crawling on the sun, has been erected on Meridian Hill, about three miles to the northward and on the same elevation as the Venus station. Upon these figures the chief and his assistants practise regularly in the measurement of cusps, distances, diameters, &c. In all these artificial Venuses care has been taken to have the disk of the planet appear of the same size in the double image micrometer as she will actually possess on the 9th. One of the curious cases studied is that wherein Venus is painted as she will appear when only ten seconds upon the solar disk. With the slightest unsteadiness of the atmosphere it is almost impossible to make out this edge of Venus. This is a point that can be studied by all the parties when they return; and the results will never be satisfactory until each observer has adopted a similar experiment in the field or upon his return from the field. Let a board be painted to represent a part of the disk and border of the sun, and thereon let there be painted black segments representing Venus when one second, two, three, &c., to ten or fifteen seconds on the limb of the sun. The observers should then practise and endeavor to ascertain what is the smallest segment visible under similar circumstances to those in which they observed. If the practice with an artificial Venus is difficult when the observer knows exactly where to look for it, the difficulty is tenfold increased when the exact spot of her ingress is not certainly known.

Another part of the duty of the astronomical members of the party has been the occultations of stars, that the different stations may have some means of ascertaining their difference of longitude. The photographic means of recording the appearance of Venus upon the sun's disk at given epochs are ample for the smallness of the party. The photographic telescope is that devised by Professor Winlock, of Cambridge Observatory, and consists of a six inch object glass, by Clark, mounted very solidly upon a boiler iron pier, firmly imbedded four feet below the surface of the ground.

In equatorial instruments the clockwork, geared into the polar axis, moves the telescope, so that when directed to any given celestial body it will follow the object pointed upon, and thus enable the observer to make continued observations with the star, sun or planet apparently fixed in the telescope. In this device of Professor Winlock, who is, by the way, one of our most mechanically ingenious of astronomers and mathematicians, the telescope is fixed, and must not change its position. Therefore, a large heliostat, moved by clockwork, is placed to the north of the photographic object glass (in the northern hemisphere), and the plane glass mirror of the instrument is turned in such a manner that the reflected image of the sun is continually directed in a straight line through the objective to the reticulated and sensitized plates in the dark photographic room.

The object glass of this fixed photographic telescope is directly in the meridian of the transit instrument which is placed to the north. At the chemical focus of this lens (redetermined at this station) is a reticulated plate of glass mounted upon a plate similar to that used for the object lens. This plate is capable of adjustment both horizontally and vertically; but lest minute errors should creep into its adjustment, it has a level upon the top, and from the upper part is hung a silver wire with plummet, by which means its error of adjustment can be measured. The chemical focal distance of the lens is thirty-eight feet five inches, and at that distance the image of the sun is four and three-eighths inches in diameter. It gives pictures with sharp outline under fair circumstances of weather. As the principal measures of the photography are intended to determine the distance and direction of the centre of the planet from the centre of the sun during the progress of the transit, certain instrumental conditions must exist. If defective in a small degree the correction can be determined by reading the level with the plumb line in two positions, one when a little more than half the sun is photographed, with the reticulated plate in a direct position and half of it screened, and then when in a reversed position.

All the details of these instrumental errors and their determination have been fully studied out by the Commissioners. As it is doubtful whether the first contact at ingress can be seen by the eye the photograph will be used to determine, as nearly as practicable, the instant of contact. As it cannot do so directly a series of rapid photographs will be made from the computed time of contact for the next five minutes; the time of each exposure will be noted on the chronograph by electricity, and after the planet is well advanced on the solar disk it is believed that by these times and the size of the segments of Venus' limb the epoch of contact can be derived directly by proportion. In practice the party has taken ten of these in as many seconds. Several methods for executing this were tried. The one adopted gave the most rapid work.

REMARKABLE DEVICE OF A FRENCH ASTRONOMER.

The French party under Janssen have great faith in this method, and he has perfected a contrivance by which he obtains forty-eight pictures of the sun's border at ingress in one minute.

During the progress of the transit, which lasts four hours and forty-six minutes, it is expected that the party will obtain, besides the rapid ones at beginning and ending, not less than two hundred full sized photographs of Venus' position on the sun's disk. It will be seen that the American parties are fairly prepared to observe all the phenomena of this transit by the photographic and astronomical methods; and this is the case generally with all other parties. But a still more beautiful method will be essayed by some of the parties of other nations, and probably by the American party at Pekin. The means by which Janssen and Lockyer determined the epochs of totality in a solar eclipse with the spectroscope can probably be used here. It is now well established that just outside the solar photosphere, and between it and the chromosphere there is a stratum of solar atmosphere which exhibits in the spectroscope the radial, bright colored lines or bands which indicate the presence of glowing or luminous vapors or gases. This was first discovered in 1870, during the total solar eclipse of that year, when the direct light of the photosphere was cut off by the interposing body of the moon. By proper instrumental contrivances, these bright lines can be seen at any time. So long as these bright colored lines are seen there can exist no interposing body, but the instant their brightness disappears, the observer knows that the limb of a solid body, such as the planet Venus, has been interposed between him and the border of the sun and at that instant is in apparent contact. The reappearance of these bright lines on the sun's limb, as the outer limb of the planet draws upon the sun, announces the instant when Venus has fully entered upon the sun's disk. Similar phenomena, in reverse order, will occur at the time of the egress contact. Several difficulties obtrude themselves for the accurate determination of the first ingress contact, especially that of knowing exactly at what point on the sun's limb the first contact occurs, although the position can be computed with sufficient accuracy for eye observations; but it will be essayed, nevertheless, and probably the reported ingenious adjustable ring slit devised by Mr. Lockyer will give satisfactory results, if we can judge from the tests to which it has been submitted. At any rate the observation of external contact at egress by this method is very useful as supplementary to the two internal contacts; and by a comparison of the times by the three means—astronomical, photographic and spectroscopic—we shall derive some valuable data by which to homologate the results of all the observers. It would have been well to attempt this method in all the American parties; but the Commission did not place faith in its success.

Having given the means to be employed in this transit of Venus to determine the distance of the earth from the sun, it may not be inappropriate to mention briefly other methods of solving the problem. Even in the present state of science they are less trustworthy than the system of observing the transit of Venus; but these occur with almost disheartening rarity, whereas relatively inferior methods, with accumulated observations skilfully treated, have yielded more trustworthy results.

PREVIOUS PLANS OF SOLVING THE PROBLEM.

I.—By the parallax of Mars.

The parallax of Mars can be determined by observations upon that planet at and near opposition. Every fifteen years this planet is at its shortest distance from the sun, at the same time that the earth is at its greatest distance therefrom; and moreover they are on the same line with the sun. At these times the planets are only 33,000,000 miles apart. The problem consists in measuring from two widely separated stations on the earth the angle of Mars, subtended by the projections of Mars in space from the two earth stations, or obtaining the same measure from one earth station which is carried by the earth's rotation to where a second station might be supposed to exist. In the observations for this purpose certain conditions are demanded that need not be here explained. It is assumed, in general explanation, that the two earth stations, Mars and the stars to which the projections in space are referred are all in the same plane. But the fundamental condition is that the distance from the earth to Mars is so small in comparison with the distance of Mars from the stars that it is an unmeasurably small quantity, so that the observer may be supposed located on Mars. Assuming Mars not to move in relation to the earth, the observer at one earth station measures the angular distance between a star near Mars and the planet which coincides with the projection of Mars in space. At the second earth station the observer measures a similar quantity, and the difference of these two are measures is the angle at Mars of its projection into space as seen from the two earth stations. Knowing the distance apart of the earth's stations and the observed angle we readily derive the distance of Mars from the earth at that epoch. Then by Kepler's third law we derive all the other planetary distances and sizes. The variation of the method of using two stations whereby the apparent position of the planet is affected by the changing of the observer's position on account only of the diurnal rotation of the earth was employed, as well as the original method, in 1862, and the result confirmed the impression which other investigations had created that the distance of the earth from the sun was certainly less than 92,000,000 miles.

II.—By the velocity of light.

After the dimensions of the earth's orbit were known, the velocity of light through space was measured in two ways by astronomers; by the difference in time of the calculated and observed disappearances and reappearances of Jupiter's satellites at his opposition and conjunction, and by the aberration of the fixed stars. But neither of these reveals to us the real velocity of light. It remained for Fizeau and Foucault to solve a problem apparently so intractable, where a velocity of 185,000 miles per second was involved. This is not the place to reproduce the method devised by these experimenters, but the result by Foucault's method, which in some respects is superior to Fizeau's, gave a velocity to light in the interplanetary space, as well as in air, of 180,000 miles per second. From this we deduce the value 91,400,000 miles as the distance of the earth from the sun.

III.—By a certain irregularity in the moon's motion, due to her being most disturbed by the sun when between the earth and sun.

The law of gravitation declares that the attraction between masses depends upon the distance between them. The moon is attracted to the earth by a force depending upon their distance, which is known. When the moon is between the earth and the sun the latter tends to draw her away from the earth, so to speak, more strongly than to pull the earth away from the moon when the moon is in opposition. A similar tendency exists for all the positions of the moon when nearer the sun than the earth is. The effects of these differences of attraction are shown in the acceleration and retardation in her orbit, and in the distortion of that orbit, which is thereby elongated in a direction at right angles to the line through the moon, earth and sun. In the moon's motion the slight variation, which depends upon this cause alone, can be calculated theoretically. If we know the exact distance of the earth from the sun and that of the moon from the earth the theoretical motions of the moon should agree with the observed motions. If they do not agree the difference is used as the basis for the determination of the real distance. The perturbations are, of course, very minute, but the observations are so numerous and so exact that, in 1854, the eminent mathematician and lunarian, Hansen, actually detected the difference and ascribed it to the true cause. This led to a rediscussion of the whole subject and a confirmation of Hansen's deduction. From these results he assigned, in 1863, a distance of 91,659,000 miles as the mean distance of the earth from the sun. In this method of investigation we are indebted to Laplace, who deduced a value of the distance, very little different from Encke's results derived from the transits of Venus.

IV.—By an irregularity in the earth's motion, due to her moving around the common centre of gravity of her own mass plus that of the moon.

In a few days the success of the French and American parties in Japan will be settled. Both are fully prepared and ready for the work; all else depends upon the weather. That result will be known long before this reaches the Atlantic States. D.

THE AMERICAN SUCCESS IN JAPAN—FIVE HOURS' LABOR UNDER PALPITATING CIRCUMSTANCES.

NAGASAKI, Dec. 12, 1874.

The transit of Venus for 1874 has become an event of the past. The night preceding the great event was a beautiful one, but the morning opened cloudy, affording intervals, however, in the lower stratum of clouds which enabled the party to get their preparatory photographs, and at nine A. M. all the necessary instrumental measurements had been finished. Again the clouds thickened; there was an upper stratum of cirrus and cirro-stratus that cut off the heat rays of the sun and left a quiet, clear atmosphere, but the heavy cumulo-stratus clouds that came slowly from the southwest foreboded rain. Just before the first contact the lower clouds partially broke and allowed the formation of a good image of the sun's disk until about ten or fifteen seconds before the actual contact, when they thickened and remained so for about twenty-five seconds. When the vapors again rolled away the limb of the planet was seen advanced about ten seconds on the disk of the sun.

Thus the decisive moment at which the first external contact took place could not be noted by the observers. When Venus' western hemisphere had just been projected on the solar disk, the heavens cleared, and the work of measurement of the apparent distance between the planet's cusps was commenced. The critical instant of the second contact was clearly and accurately noted, it being observable through the hazy atmosphere. No ligament, band or black drop was observable, yet a slight unsteadiness prevailed, such as observers continually experience in geodetic work over long lines, and which any one can see in excess over a marsh in hot weather. Then followed measures of the separation of the limbs of the planet and the sun; then the measures for the diameter of Venus.

After the taking of 150 micrometer readings in these various operations the clouds thickened and prevented further operations for some time. During the comparatively bright period the photographic operations were carried on as rapidly as practicable; in fact at the rate of working not less than 400 could have been run off. All these exposures were noted by the electric method on the chronograph. When the sun reached the meridian there was another slight break in the sullen clouds, and the limbs, both of the sun and of Venus, were observed in the coast survey transit sent out for these measures. The transit of both limbs of the sun over fifteen threads of the micrometer was observed, and of both limbs of Venus over sixteen threads. With another transit instrument the difference of declination between the sun's upper limb and the limbs of Venus was also measured.

From this time until ten minutes before two o'clock other observations were made for the determination of the diameter of the planet, after which period the luminary became totally obscured and continued so for nearly an hour. Toward three o'clock a slight break took place in the intervening gloom, and with vicissitudes of light and darkness the planet was observed as she advanced toward the sun's western limb. A few moments before the third contact several micrometric measurements of the distance between the limbs were made. No ligament or blur was visible; but the epoch of this contact could not be noted, black masses of vapor having rolled between. Every colored glass was dispensed with but the critical junction was, nevertheless, not discernible. Five seconds after its occurrence a faint glimpse was caught of the planet's position; the micrometer was again brought into requisition, and a few more measurements of the line joining the cusps were obtained with a darkening sky and threatening rain. Not long afterward the rain came down, and the labors of the observers were at an end.

IMPORTANCE OF THE OBSERVATIONS AT JAPAN.

The results of the day's work may thus be epitomized:—The second contact was well observed; the first and third were doubtful. There were obtained 150 micrometer readings for the distances apart of the sun's cusps, separation of the planet's limbs from those of the sun and of the diameter of the planet, which latter must throw much light on the question of irradiation. Thirty-one transits of both limbs of Venus and the sun at the meridian, eighteen micrometer differences of declination on the meridian, and sixty good photographs with sharp outlines and Venus well shown, were likewise noted and duly registered. There is no doubt that good results can be obtained from these observations, and it will be more than is expected, if all other parties are equally successful. There was no period of the day after ten A. M., when the sky was cloudless; and the chief of the party attributes his excellent micrometric measures to the very existence of the upper stratum of light clouds, which gave a fairly steady atmosphere. During the evening the clouds separated for about forty minutes, during which excellent observations for time were obtained to check the errors of the chronometers. D.

THE TRANSIT IN TOKIO.

YOKOHAMA, Dec. 21, 1874.

Of course the great event of the month has been the transit of Venus. No less than five foreign commissions have observed it from some point in Japan. In Nagasaki there was an American Commission and a German one, in Kobe a French one, in Hakodadi a Russian one and in Yokohama a Mexican. Of course such an event, which had been discussed in almost every newspaper in the world, could not fail to attract attention among the Japanese, and although they were not prepared to view it in a manner that would be of any use to the scientific world, several Japanese scholars were sent by government to the different commissions. Among those very much interested in the great event of the century was the Mikado himself. He was very desirous of observing the phenomenon and therefore requested Lieutenant Murray S. Day, United States Navy, at present the engineer in charge of the survey of the island of Yesso, and who is in Jeddo for the winter, to erect the necessary instruments in the imperial palace grounds. Lieutenant Day did so, explaining to a large audience, consisting of the Emperor and Empress and imperial household, Iwakura, Sanjo and all the principal officers, the different phenomena and the importance of the observation in a scientific point of view. The Emperor expressed himself highly pleased with Mr. Day's lucid explanations and seemed to have understood the illustrations. I am indebted to the courtesy of Mr. Day for the following memoranda of his observations:—

TRANSIT OF VENUS OBSERVATIONS, }
TOKIO, Dec. 9, 1874. }

Observations made with portable astronomical transit No. 55, manufactured by Würdemann, of Washington. Times observed with a Negus sidereal chronometer, No. 1,549, having a daily rate of 0.4s., gaining:—

First exterior contact, 6h. 56m. 51s. Approximate.

First interior contact, 7h. 23m. 38s. Very good.

Second interior contact, 11h. 14m. 35s. Very good.

Second exterior contact, 11h. 42m. 05s. Tolerable.

M. S. DAY, Observer.

THE CENTENNIAL.

What We May Achieve as a Republican Nation.

EX-GOVERNOR BIGLER'S VIEWS.

Progress of the Work in "the City of Brotherly Love."

EXPECTATIONS BASED UPON THE BOUNTY OF CONGRESS

A Financial Agency Established in New York City.

In the HERALD of yesterday the announcement was made that the Centennial Commission had at last invaded our city, and, through its financial agent (ex-Governor Bigler, of Pennsylvania), had opened an office at the St. Nicholas Hotel with a view of interesting loyal metropolitans in the exhibition which is to commemorate the one hundredth anniversary of the nation's birth. Such an announcement, after all that has been said pro and con regarding the Centennial Celebration, naturally justified a visit from a representative of a journal that strives to record every event occurring in those portions of the world where the types speak and the electric telegraph touches the hearts of the millions who read and think. The writer yesterday sought the rooms of the Centennial Commission, and found them to be very modest quarters on the second floor of the hotel. He was met by ex-Governor Bigler, who was requested to permit himself to be interviewed on matters "centennially interesting." The Governor, after hesitating a few moments, said:—"I shall be happy to give you any information in my power; but on what points do you wish my views?"

REPORTER—Oh, merely to state the general prospects of the venture. So much has been uttered and written on the subject that Americans sometimes forget the great undertaking. I wish you would express your views generally.

Governor BIGLER—It is worthy of note that the first practical step taken in the way of the Centennial Celebration came from

THE AMERICAN INSTITUTE OF THIS CITY

in 1870. In 1871 Congress commended the idea of celebrating the event that brought the American Republic into existence, and passed laws regulating the management. These laws in their operations are coextensive with the entire country, leaving the States perfectly equal as to any dignity or responsibility that might arise therefrom, except that it was to be located in Philadelphia. Every State in the Union is represented in the management. Pennsylvania has acknowledged the honor conferred upon her by providing more than half the capital required for the preparations. The city of Philadelphia as a corporation and the State paid $2,500,000 toward erecting the buildings, because under the State constitution neither could invest in the stock of a corporation. The people and railroad companies subscribed over $2,000,000 in addition. The buildings, except the agricultural department, which can be erected in a few months, are all under contract.

REPORTER—Can you give me statistics as to the progress of these buildings?

Governor BIGLER—Yes. The Art Gallery, covering an area of two acres, the materials of which are brick, granite, iron and glass, is perfectly fireproof, and is contracted for at $1,200,000, and, with drainage, heating, &c., will cost about $1,450,000. About $1,500,000 has been appropriated by the city of Philadelphia and the State.

THE MACHINERY HALL

is to be a building covering about fourteen acres, and its construction has been contracted for at $575,000. This is provided for by an appropriation of the city alone. It is to be completed October 1, 1875, under heavy penalties, and it is now in process of construction. The Conservatory covers about two acres, is contracted for at $260,000 and is to be completed October 1, 1875. This is also provided for by the city of Philadelphia.

THE MAIN EXHIBITION BUILDING

covers about twenty acres and has been under contract for six months at $1,500,000, and is to be finished the latter part of December, 1875. The foundations are already made, and are ready to receive the columns. The work of erecting the structure, which is to be of iron and glass, will begin in the early spring, the manufacturers of the material being confident that they can have it all ready by April 1. The means for the erection of this structure are to come from the sale of stock and other sources. The subscriptions already made to stock exceed $2,000,000, a considerable portion of which has already been expended in incidental things.

THE AGRICULTURAL DEPARTMENT

will cover a space of ten acres, and cost about $375,000, and the work on this will begin in the spring and can be finished in three or four months. I estimate the probable cost of water, gas, drainage, sewerage, &c., at about $1,000,000.

REPORTER—Governor, let me ask a question. I believe that Mr. Goshorn, of Ohio, is the Director General. What has he asked from Congress for this purpose?

Governor BIGLER—He does not ask for an appropriation (hesitating). Having gone to the extent of $5,000,000 in raising capital the directors have determined to reserve to the people, as individuals, the glory of having raised many millions to commemorate with fitting ceremonies the events that brought our Republic into existence, and the Centennial Department established in this city is expected to play an important part in raising the balance of the capital. What the Director General would press upon the favorable attention of Congress are certain specific things with which the government is specially identified. For instance, by the express terms of the law all the proposed ceremonies are to be conducted under the auspices of the government of the United States. It is maintained, therefore, that the government ought to furnish the police guard for the six months that the Exhibition will be open, that it may have a direct care over the order and dignity of the proceedings. Besides, for the outer guards, soldiers or marines could be used, and thus the cost to the government for guarding would be slight, instead of compelling the city to bear this expense. It is maintained, also, that the government should provide for the premiums in whatever shape they may be, because the Exhibition is international, and any token of award, from a mere corporation in the hands of a foreign exhibitor, would sink below the dignity and courtesy extended to American exhibitors in Europe, for the awards, in every instance, came directly from the government. It is, therefore,

THE DUTY OF THE GOVERNMENT

to do what the corporation has not the power to do properly. The laws of Congress require the certificate to be designed and executed in the Treasury Department, thus excluding all competitors. It is, therefore, maintained that the government ought to supply certificates; so also as to the manufacture of the medals in the Mint, for it is doubtful whether the expenses of the Mint will be increased to the slightest extent. The Centennial managers think also that, as the law forbids compensation to the Commissioners, Congress might properly provide for the individual expenses of these gentlemen, who are obliged annually to gather at Philadelphia from every State in the Union. To this extent only do the Commission and Financial Secretary look to Congress for aid.

REPORTER—And, Governor, what would this involve in the form of an appropriation from Congress?

Governor BIGLER—I cannot tell. Probably the expenditure of from $800,000 to $900,000.

REPORTER—How extensive is the organization for raising money?

Governor BIGLER—It extends through all the States, except those of the South, and in all the States facilities for subscribing to stock or contributing are furnished. The managers think it a duty to present to the citizens of the entire country an opportunity of participating in the glorious work. By the use of the emblematic medals that participation may be from $1 up to an indefinite sum.

REPORTER—Emblematic medals. What are they, Governor?

Governor BIGLER—That is a matter that will take too long to explain. The usual form in the different cities is the selection of

A COMMITTEE OF PROMINENT CITIZENS,

who designate canvassers to visit every house with subscription books, &c.

REPORTER—What stock has been taken in the various States?

Governor BIGLER—About $2,200,000 has been individually taken in the various States. I received yesterday four subscriptions in this city aggregating $6,000.

REPORTER—In conclusion, Governor, may I ask what importance do you attach to this grand Exhibition as a means of extending the fame and making known to the world the internal wealth of our country?

Governor BIGLER—Of the vast influence a successful exhibition can have upon the progress and development of a nation the London Exhibition of 1851 is a most remarkable example.

THE LONG PEACE SUCCEEDING WATERLOO

had brought to Great Britain great material prosperity. The great manufactories had received remarkable expansion, the new railroads had fostered the spirit of enterprise and speculation; but in all that pertains to the cultivation of art and the diffusion of culture and education among the masses England had remained almost where she was at the beginning of the century. How far she was lagging behind in the great march of European progress the exhibition of 1851 only made manifest. Viewing the assembled wealth of nations, she saw her weakness, and, be it said to her honor, knew how to take the lessons to heart. From the seeds of knowledge sown in 1851 date the museums, the halls of art and science, the technical schools for the education of working men, which now are busy teaching the youth the proper development of their natural abilities, preparing them to grapple with the strong arm of knowledge, with the demands of their age and country. And the country itself has grown. The love of art, of the high, the beautiful, has been developed, and to-day England stands as one of the great emporiums of the world in all that relates to the production of the beautiful as well as the useful. The awakening of 1851 has developed education, the spirit of inquiry, competition, new industries, new opportunities. From the French exhibition of 1852, too, dates the extraordinary material progress of France. There assembled together the wonderful resources of the land. Men became conscious of unsuspected wealth. They could compare their advantages with those of other nations, and manufactures grew apace. Internal improvements became necessary, for men could at a glance learn and see how they had become necessary. New channels of commerce, of art, of manufactures, were created; new mines were opened; new industries were called forth. From these first exhibitions others have grown, mightier and more comprehensive.

A NEW LITERATURE HAS

been developed, and European Powers have compared again and again—have so thoroughly competed with each other, have so studied the resources, the opportunities, the strength and weaknesses of each other, that to-day civilized Europe stands almost as a compact whole—a land where only the differences of language mark the boundaries of individual industrial progress. Even in our own land the wave of culture and education produced by the great competitive art concourses of nations has done and is doing its work. Look around and see the advance made in the last twenty years in the art-knowledge and love of the beautiful of our people. Before the great exhibitions art, pictures, the thousands of little and unnoticed trifles which add so much to the comfort and happiness of the poor and lowly—of the struggling, working masses—were unknown. The enjoyment of the beautiful was a privilege of wealth alone; art was aristocratic, while exhibitions, being the work of the people, are democratic, and thus, cultivating, educating the people, art has become democratic. The great struggle of modern civilization is not to debase and drag down the educated and wealthy, but to enlighten and cultivate the poor and lowly. The problem of our age and country is to so elevate and enlighten our people that they may know their strength and see the proper means to apply it.

AMERICAN PROSPERITY MEANS INTERCOURSE,

knowledge, circulation, the proper diffusion of energy and power, and what man, American though he be, can have more than a faint and indefinite idea of the resources and opportunities of this our own country? Never yet, so rapid, so immense has been the development of our land, have we known our true status, and now, in one hundred years from our birth as a nation, we propose doing that which wise business men do yearly—have our great stock-taking. Here we will assemble the ideas, the inventions, the grains and fruits, the minerals and ores, the machinery and tools of our great country. Here will we gather together the workman from his bench, the farmer from his plough, the merchant, the manufacturer, rich and poor, young and old, and let them judge for themselves of their national wealth and greatness—let them see and ponder over the mighty gifts which God has given us, as well as on the work which our teeming millions have consummated. Our people will see in what we are strong, in what we are weak. Competition, that great lever of modern progress, will grow with tenfold force, and he who believes not that his countryman returning from this great world's competitive examination will not strive and struggle with new life and energy, new pride and fortitude, must needs despair of his time and nation. What have we done in this hundred years? Can you, or I, or any one, answer? In politics, in humanity, in population, yes; but in industry, in development, who can bring home, not to Americans alone, but to the world, the story of our work? No book can contain it, no words describe it; but, like the wise old nations, who pictured their histories on stone walls, in sculpture and painting, we can show what we have done, so that he who runs may read, and succeeding centuries may wonder, as to-day the world will wonder, at this story of a hundred years of faith and work. Americans, seeing what has been done, will be quickened to new endeavor. Pride, interest, knowledge of opportunity will combine. The people, permeated with the knowledge of what is possible, will struggle and strive to attain it. Schools, museums, laboratories, manufactories will grow. Nations—the Old World seeing and knowing the blessings of opportunity which hover over a land so graced with material greatness—will bring their offerings of men and money. Emigration will grow anew, capital will flow forward to develop our mines and prairies, the fires of

THOUSANDS OF FACTORIES WILL BE LIGHTED.

It needs but this unification, this gathering of our forces, this mighty congregation of our nation, this exhibition of our country's joy, fittingly represented by our people's work, to place the key-one of our arch of greatness. Who, when we have assembled the result of but one hundred years of toil and progress, will gainsay to us the proud title of the greatest nation that is to be?

THE IMPASSABLE STREETS.

TO THE EDITOR OF THE HERALD:—

The Police Street Cleaning Department receives $800,000 per annum for cleaning the streets. It has done next to nothing since the last storm. Is there no way of compelling it to a performance of its duty?

The gutters are filled with ice, and the sidewalks are like skating ponds. What wholesale robbery must be going on! Stop this fraud if you can. TAXPAYER.

MARRIAGES AND DEATHS.

MARRIED.

GARTHWAITE—HART.—In Brooklyn, January 28, by Rev. Dr. Duryea, at the residence of the bride's parents, HARRY A. GARTHWAITE, to ETTIE LOUISE, daughter of Charles and Esther Hart.

LITTLE—GREEN.—On the 28th inst., at the residence of the bride's parents, by the Rev. Heber K. Newton, assisted by the Rev. James A. Little, ANDREW LITTLE to LAURA M., eldest daughter of John E. Green, Esq.

LA ROCHE—MARKS.—On Wednesday, January 27, by Rev. Mr. Mansfield, at the residence of the bride's parents, Spring Valley, N. Y., WILLIAM J. LA ROCHE, of Closter, N. J., to ELLA, daughter of Edwin Marks, Esq., of the former place.

RICHARDSON—BAKER.—On Wednesday, January 27, at St. Bartholomew's church, by the Rev. Samuel Cooke, D. D., THOMAS CHESLEY RICHARDSON to EMMA M., daughter of Peter C. Baker, Esq., all of this city.

TRIPLER—DAVIS.—On Thursday, January 28, 1875, at St. Michael's church, by the Rev. Dr. Osgood, CHARLES E. TRIPLER to ISABEL S. DAVIS, all of New York.

WILLIAMSON—BROSLE.—On Monday, January 25, at Port Richmond, S. I., by the Rev. S. G. Smith, GEORGE D. WILLIAMSON to LOTTILLA E. BROSLE. No cards.

DIED.

ALLEN.—On Thursday evening, January 28, 1875, ANDREW ALLEN, in the 6th year of his age.

Relatives and friends of the family are respectfully invited to attend the funeral, on Sunday, January 31, at one P. M., from his late residence, 273 West Fifty-second street.

BENN.—On January 29, KATE, wife of Isaac Benn, in the 53d year of her age.

The funeral will take place from her late residence, No. 255 Ninth avenue, on January 31, at half-past one o'clock. Relatives and friends of the family are respectfully invited to attend.

BREWER.—On Wednesday, January 27, SOLOMON K., beloved son of Mary J. and the late Nelson Brewer, aged 29 years, 10 months and 13 days.

Relatives and friends of the family, also members of the Gramercy Boat Club, are respectfully invited to attend the funeral, from his late residence, No. 255 West Twenty-sixth street, at ten o'clock, on Sunday, 31st inst. The remains will be taken to Tarrytown for interment.

BURTNETT.—At Elizabeth, N. J., on Friday, January 29, SUSAN BADEAU BURTNETT, in the 59th year of her age.

Notice of funeral to-morrow.

CASHOW.—On Thursday, January 28, Mrs. ELIZABETH CASHOW, aged 74 years, 4 months and 18 days.

Relatives and friends of the family are respectfully invited to attend the funeral, from the residence of her daughter, No. 98 Union place, Greenpoint, on Sunday, the 31st inst., at two o'clock P. M.

CHADSEY.—At Decatur, Ill., yesterday, January 29, 1875, Miss SARAH LOUISA CHADSEY, daughter of Dr. A. J. Chadsey, of this city, aged 18 years and 4 months.

CROLIUS.—Suddenly, on January 28, GEORGE H. CROLIUS, in the 38th year of his age.

Relatives, friends and members of the United Trade Association of Journeymen Sailmakers are respectfully invited to attend the funeral, from his late residence, 41 Sullivan street, on Sunday, January 31, at one o'clock P. M.

CROSSMAN.—Suddenly, on the 29th inst., of membranous croup, BLANCHE EVA, youngest child of William H. and Charlotte B. Crossman.

Notice of the funeral hereafter.

DE RUDDER.—On Thursday, January 28, 1875, JAMES F. DE RUDDER, aged 54 years.

The relatives and friends are invited to attend the funeral, on Saturday, January 30, 1875, at two o'clock P. M., from his late residence, 845 Sixth avenue.

DOUGLASS.—In London, England, on the 17th of December last, C. C. DOUGLASS, of the city of New York.

Funeral services at Detroit, Mich.

DREYER.—In this city, January 29, 1875, after a short illness, EDWARD DREYER, of Bremen, Germany.

Relatives and friends of the family are respectfully invited to attend the funeral, from St. Paul's Lutheran church, corner Sixth avenue and Fifteenth street, on Sunday, at one o'clock P. M., without further invitation.

DUNSCOMB.—On Wednesday, January 27, CHARLES S. DUNSCOMB, aged 46 years.

The relatives and friends of the family are invited to attend his funeral, from his late residence, at Peekskill, N. Y., on Saturday, at one P. M. Trains leave Grand Central Depot at 9 and 11 A. M.

ENGLAND.—On Friday, January 29, after two days' illness, of diphtheria, CLARA, aged 4 years and 9 months, the beloved daughter of James and Julia England.

Relatives and friends of the family are invited to attend the funeral, from the residence of her parents, No. 315 West Fourteenth street, this day (Saturday), January 30, at half-past two o'clock P. M.

FORMAN.—In Brooklyn, on Friday, January 29, of pneumonia, JOHN A. FORMAN, in the 65th year of his age.

Relatives and friends are respectfully invited to attend his funeral, on Sunday, January 31, at half-past one, from the Franklin avenue Presbyterian church. Rev. S. P. Halsey, pastor.

Edinburgh (Scotland) papers please copy.

FREEL.—January 29, 1875, in Brooklyn, ALICE, only child of Edward and Julia Freel, aged 1 year, 4 months and 15 days.

Funeral at two o'clock on Sunday, 31st inst., from 34 Kossuth place to Cemetery of the Holy Cross.

FREEMAN.—At Ravenswood, L. I., January 28, of pneumonia, MARTHA P. FREEMAN, daughter of the late Phineas Freeman.

Relatives and friends are respectfully invited to attend the funeral, from the residence of her brother, John G. Freeman, on Saturday, the 30th inst., at two P. M. Carriages at Hunter's Point ferry.

GALLAGHER.—In Brooklyn, on January 29, BRIDGET, beloved wife of John Gallagher, in the 50th year of her age.

The relatives and friends of the family are respectfully invited to attend the funeral, from her late residence, No. 164 Butler street, on Sunday, January 31, at half-past two o'clock, without further notice.

HART.—On Thursday, 27th inst., FANNIE, daughter of Henry E. Hart.

Funeral from 453 West Seventy-first street, on Sunday morning, at half-past nine o'clock.

HARTNETT.—On January 28, DANIEL HARTNETT, aged 64 years. The deceased was a native of Killarney, county Kerry, Ireland.

Relatives and friends of the family are respectfully invited to attend the funeral, on Sunday next, at one o'clock, prompt, from his late residence, No. 128 Beekman street.

HILDERBRANDT.—On Thursday, January 28, CHRISTOPHER HILDERBRANDT, at his residence, corner of Hutton street and Sandford place, aged 47 years.

Relatives and friends are invited to attend the funeral, at two o'clock, on Sunday, without further notice.

HORTON.—At White Plains, on Thursday, January 28, SARAH, wife of Joshua Horton, in the 77th year of her age.

Relatives and friends of the family are respectfully invited to attend the funeral, from her late residence, on Sunday, at two o'clock. Carriages will be in waiting on arrival of nine A. M. train from Forty-second street.

JUDGE.—On Thursday morning, January 28, HENRY JUDGE, in the 31st year of his age.

The funeral will take place from his late residence, No. 508 East Seventeenth street, on Saturday, January 30, at one o'clock P. M. Relatives and friends are respectfully invited to attend.

KEOGH.—On Thursday evening JOHN KEOGH, county Cavan, Ireland.

Funeral from his late residence, No. 266 West Thirty-fourth street, Sunday at one o'clock.

LIVERMORE.—Suddenly, on Thursday morning, ROBERT, youngest son of W. F. and Jane H. Livermore, aged 6 months and 3 days.

Relatives and friends are invited to attend the funeral, from the residence of his parents, No. 925 Madison avenue, on Saturday, at one o'clock.

LUDLOW.—On Thursday, January 28, MARY P. LUDLOW, widow of the late Robert C. Ludlow, of this city.

The friends of the family are invited to attend the funeral, from her late residence, No. 39 West Fourteenth street, on Saturday, January 30, at half-past ten A. M.

Charleston (S. C.) papers please copy.

MURPHY.—On Friday, the 29th, MICHAEL MURPHY, a native of Limerick, Ireland, in the 77th year of his age.

The friends of the family are respectfully invited to attend the funeral, on Sunday, at half-past one o'clock, from the residence of his son-in-law, Thomas Holahan, No. 532 Hudson street.

NASH.—In Brooklyn, on January 27, 1875, suddenly, at his residence, 206 Dean street, D. D. NASH, in the 64th year of his age.

Relatives and friends are respectfully invited to attend the funeral, at two o'clock, on Saturday.

O'BRIEN.—On Thursday, January 28, at five o'clock A. M., WILLIAM C. O'BRIEN, aged 38 years, 10 months and 15 days.

The relatives and friends of the family and those of his father-in-law, Lawrence R. Kerr, Esq.; also members of the various associations to which the deceased belonged, are invited to attend the funeral, from his late residence, 455 Second avenue, on Monday morning, February 1, at half-past nine o'clock. The remains will be conveyed to the Church of the Epiphany, Twenty-first street and Second avenue, where a solemn mass of requiem will be offered for the repose of his soul; thence to Calvary Cemetery.

PATERSON.—On Friday morning, January 29, at his residence, No. 99 Carlton avenue, Brooklyn, JOHN PATERSON, in the 42d year of his age.

The friends of the family, also the members of Charter Oak Lodge, No. 249, F. and A. M.; Evening Star Chapter, No. 225, R. A. M.; Olive Branch Chapter, No. 6, Rose Croix; members of the Fifty-first N. Y. S. Volunteers, and Rankin Post, No. 10, G. A. R., are respectfully invited to attend the funeral, from his late residence, on Sunday, January 31, at two o'clock P. M.

REYNOLDS.—On Friday, January 29, WILLIAM H. REYNOLDS, in the 28th year of his age.

Relatives and friends of the family, also members of Amaranthus Lodge, No. 352, I. O. of O. F., are invited to attend the funeral, on Sunday afternoon, 31st inst., at three o'clock, from his late residence, No. 322 West Eighteenth street.

AMARANTHUS LODGE, NO. 123, I. O. OF O. F.—BRETHREN—You are requested to meet at No. 322 West Eighteenth street, on Sunday January 31, 1875, at three o'clock P. M., to pay the last tribute of respect to our worthy Brother W. Reynolds.

A. RUMLER, N. G.

RIDER.—At Greenpoint, on Wednesday, January 27, ISABELLA, the beloved wife of James P. Rider, in the 85th year of her age.

The friends of the family and those of her grandson-in-law, Mr. T. McGoey, are respectfully invited to attend the funeral, from the residence of her son-in-law, Mr. J. Gillies, No. 192 West street. Her remains will be taken to St. Anthony's church, on Sunday, at one o'clock P. M.; from thence to the Cemetery of the Holy Cross for interment.

ROBERTS.—In London, England, on the 13th of December last, CAROLINE D., wife of Marshall O. Roberts, of the city of New York.

Relatives and friends of the family are respectfully invited to attend the funeral, from the University place church (Rev. Dr. Booth's), corner of University place and Tenth street, on Saturday, 30th inst., at two o'clock P. M.

ROCKWELL.—On Thursday morning, January 28, PHINEAS LOUNSBURY, twin son of Joel L. and Anna E. Rockwell, aged 9 months and 24 days.

Friends are invited to attend the funeral, from the residence of his parents, South Norwalk, Conn., at half-past eleven A. M., Saturday, January 30, on arrival of the ten o'clock train from New York.

ROSE.—At Flushing, L. I., on Thursday, January 28, JOHN CONRAD ROSE, son of C. William and Josephine Rose, aged 9 years and 18 days.

Friends are invited to attend the funeral on Saturday, January 30, at three o'clock P. M., from the residence of his parents, on Parsons avenue.

ROUECHE.—On Friday, January 29, PETER F. ROUECHE, aged 52 years.

His relatives and friends are respectfully invited to attend the funeral, from the residence of Mr. P. Cayot, No. 69 Marion street, on Sunday, January 31, at one o'clock. Interred at Calvary Cemetery.

RUSSELL.—At 206 Elm street, Newark, N. J., on January 28, JAMES, youngest son of Grace and the late William Russell, in the 22d year of his age.

The friends of the family and of his uncle, Thomas Russell, are respectfully invited to attend the funeral services, at his late residence as above, on Monday, February 1, at two o'clock.

SAWYER.—In Brooklyn, January 29, 1875, of consumption, ROSWELL HOPKINS SAWYER, in the 72d year of his age.

Notice of funeral hereafter.

STARS.—On Friday, January 29, MICHAEL STARS, a native of the parish of Cappagh, county Tyrone, Ireland, in his 61st year.

The relatives and friends of the family and those of his brother Francis are most respectfully invited to attend the funeral, from his late residence, 366 West Twenty-fifth street, on Sunday, January 31, at one o'clock; thence to Calvary Cemetery for interment.

STEELE.—In Jersey City, January 29, of pneumonia, GEORGE L. STEELE, in the 55th year of his age.

The friends of the family are respectfully invited to attend the funeral, from the First Universalist church, near Library Hall, Bergen, Sunday (to-morrow) afternoon, at three o'clock. The remains will be taken to New Berlin, Chenango county, for interment.

STODDART.—At San Francisco, Cal., January 26, 1875, DAVID STODDART, born at Fairnie Hill, Linlithgowshire, Scotland, October 5, 1832.

WEBBER.—On Tuesday, January 26, 1875, ISAAC WEBBER, only son of Louisa and the late Isaac Webber, aged 29 years.

The relatives and friends of the family, the members of Evangelist Lodge, F. and A. M., and the members of Metropolitan Lodge, I. O. of O. F., are respectfully invited to attend the funeral, at the Universalist church, corner of Bleecker and Downing streets, on Sunday afternoon, at one o'clock P. M.

The members of Metropolitan Lodge, No. 33, I. O. O. F., are hereby summoned to attend at the lodge room, 501 Hudson street, on Sunday, January 31, 1875, to pay the last tribute of respect to Brother Isaac Webber. Be punctual at eleven o'clock A. M. sharp. CHAS. M. WINES, N. G.

JOHN H. BOLAS, Secretary.

WISNER.—On Friday, January 29, JOSEPH H., only son of John and Elizabeth Wisner, aged 25 years, 3 months and 15 days.

Funeral services will be held in the Sixteenth Street Baptist church, on Saturday, January 30, at eight P. M. The remains will be interred at Pleasantville, N. Y., on Sunday.

WRIGHT.—In Brooklyn, on Friday, 29th inst., Mrs. JULIA E. WRIGHT, the wife of Wesley Wright, in the 59th year of her age.

The funeral will take place from her late residence, 920 Atlantic avenue, on Tuesday, February 2, at two o'clock. The relatives and friends of the family are respectfully invited to attend the funeral.