OUR SCHOOLS.

An Important Decision of the Board of Education.

PUPILS NOT TO BE "GERMANIZED."

The Commissioners of Education met yesterday, the president, Mr. William Wood, presiding. The question of teaching German in all the schools was finally settled yesterday by a very decisive vote, the report against it being sustained by thirteen Commissioners out of eighteen. And not only is the German language thus doomed to a restriction in the schools, but it is said by some that the next step on the part of some of the Commissioners will be to oust that study from the schools altogether. But this is not by any means likely to be done, for between the radicals—one set wanting to Germanize the schools, the other to blot out the German—there is the sensible majority, who believe that the people have a right to German and French in the schools if these studies will tend to improve pupils' minds and not interfere with, but subserve the study of English. It is also stated on good authority that the two Commissioners, Traud and Klamroth, intend, at an early day, to move the abolition of the German language in all the classes in all the schools, this being intended to show the little esteem German citizens entertain for the boon of the German classes in the Grammar schools. Should Messrs. Traud and Klamroth attempt to make

THIS PLANK MOVEMENT.

They will assuredly be again doomed to even a greater defeat than they sustained yesterday; for the majority of the Board voted not because they desired to oppose Messrs. Traud and Klamroth, but because they believed that it was proper to allow pupils in the three higher classes of the grammar schools to study German or French if their parents had any desire that they should do so. As the Board thought yesterday that this was proper to do, it is not likely that these same gentlemen are going now to stultify themselves by making this fight an entirely personal one, and a fight altogether unworthy of the high office they hold. There was a general feeling of relief yesterday when the question was settled. It has hung over the meetings of the Board month after month as a heavy weight from which harm might come if it were not kept fixedly in its proper place, and none the less so on account of the not unseldom threatening on the part of some as to danger in the future, uncertain in its magnitude. There is no doubt the matter was involved in a number of little educational intrigues, which, though small in themselves, were serious enough to be embarrassing outside of the Board of Education. The hall was crowded during

THE PROCEEDINGS OF THE BOARD

yesterday afternoon, and both Commissioners and audience paid marked attention to the proceedings. Eighteen members were present, and after the reading of the minutes, Commissioner Klamroth arose and said he wished to make a personal explanation.

At the last meeting, on the 19th of January, he was called to order by Commissioner West, and in the dispute which arose some words passed between them. It was reported in one of the papers that Commissioner West had said that if Mr. Klamroth would not retract his remarks in the Board he would turn him out of the Board. Commissioner West, on being questioned, denied having made such a remark, but said he would make him answer outside of the Board.

President Wood said he had not heard any remarks of the kind made on the day mentioned.

After some routine business was gone through with the question of the day was brought up on a previous resolution of J. Grenville Kane regarding the long standing report concerning German in the public schools. Several communications were read, of which the following is

A SPECIMEN PETITION.

TO THE HONORABLE THE BOARD OF EDUCATION:—

GENTLEMEN—The undersigned committee, by authority of the central organization of Taxpayers' Associations of the city of New York, would respectfully beg leave to represent to your honorable body as follows:—

It is with us no uncommon interest that we have followed your discussion of the question relative to the teaching of the German language in our public schools, and the arguments used before you, pro and con, have provoked several interesting debates at the sessions of your organization.

Whatever difference of opinion may have at any time existed in the minds of any of your delegates as to the minor details for the successful carrying out of the German course as now provided by your bylaws, nevertheless we are unanimous of opinion, duly and officially expressed, that the retention of your existing bylaws having reference to the teaching of German would assuredly be a lasting benefit to those of the scholars availing themselves of the course.

We do not wish to reiterate the reasons so often repeated to you during the last twelve months, such as that our vernacular being founded on and in large part formed out of the Anglo-Saxon, a thorough knowledge of the German would materially aid in mastering and fully comprehending the English language, besides other arguments more or less pertinent and convincing. Our sole object in thus intruding upon your time and attention is to acquaint you with the sentiments of a large portion of your tax-paying community on so all important a topic, and which furthermore causes the city an expenditure of a certain sum of money. We would beg leave to urge that while we shall at all times strenuously oppose all needless expense and extravagance of every kind in the administration of the affairs of our city or of any of its departments we are ever ready and willing to do all in our power to advance the interests of our public school system, being assured that on that bulwark in a great measure rests the future of our country. Our public schools shall always have our pecuniary and moral support, and, far from begrudging the amount necessary to further be proper introduction and maintenance of the study of German as a part of the ordinary studies of our children, we are and always will be ready to assume our share of the responsibility in order to insure the successful carrying out of your rules, when the same tend to promote the interests of our educational system.

We would, therefore, respectfully, yet earnestly, ask you to retain the study of German, as at present provided by your bylaws, and to suffer no change to be made therein which would curtail the advantages now enjoyed by those wishing to undertake the study of that language. Very respectfully, yours,

F. SIGEL, Vice President and Chairman.
C. J. MEHRLAS, Secretary.
EDWARD J. H. TAMSEN, A. LEESON, Dr. AUGUST HERMANN, } Committee.

THE FORMULA OF PETITION.

A number of other communications from over thirty different German societies, headed by the following resolutions were read:—

Whereas the debates in the two last meetings of your honorable Board have shown that the teaching of the German language in our public schools does not meet with the approval of the majority of your honorable Board, be it for the reason of an apparent economy or for the reason of animosity against the German Americans; and whereas we cannot be led to believe that a number of high-minded and educated men as your honorable Board consists of would willingly and knowingly drive thousands and thousands of children out of our public into our sectarian schools, thereby strengthening the present movement for the support of the latter out of our public funds; and whereas we deem it our duty to correct the entirely erroneous presumption of some of your members, as if the masses of the German-American citizens were not deeply interested in this question, while you can scarcely find one out of each hundred who would not rise with a cry of indignation if your honorable board should enact, as is now threatened by the pending motion before you.

Now, therefore, we respectfully petition your Honorable Board not to degrade our public schools, the present pride of our nation, by denying what the public schools of almost every great city on the European Continent grant, viz.—the instruction in another besides the mother language, and by rejecting such motion to show to the world that the Board of Education of our metropolis stands above all other on the one question of the true welfare and thorough education of our youth.

The following are the names of the societies.—Allemania Mannerchor; Fidelitas Deutscher Corps; Tuesday Bowling Club; Arion Quartet Club; Singing Society Abt Schuler; New Yorker Sangermunde; Mannergerong Verein; Deutsche Quartet Club; Agoniz Scientific Association; Grand Lodge I. O. F. S., of I.; Dr. Kane Lodge U. O. B. M.; Germania Sterbekasse; New York Liederkranz, Goethe K. U. V., No. 1; New York Kugel Association, Handel Society, Isachar Widow and Orphan Benevolent Society, Silubertb Mannerchor, German Machinists Association, German Citizens, Teutonia Union Verein, Bund der Freidenker, Importers and Merchants of Grand street and vicinity, German Engineers' Society, Union Showcase Maker Verein; Merchants of Hispenard street; E. P. Gleason Manufacturing Company; Abarbasel Lodge No. 92, I. O. B. B.; Typographia No. 1. All these communications were ordered to be placed on file.

AN IMPUDENT DOCUMENT.

Another communication from the Independent German Association of the Eighth Assembly begins with the following sentence:—

"The adoption of foreign languages, and especially the German language, in the regular course of instruction in our public schools is savagely attacked through the narrow mindedness and national prejudices of a majority of the members of our highest Board of Eucation before it has been allowed a fair trial, but we propose to show that instruction in foreign languages, and especially in German, should be highly appreciated by Germans as well as by all other nationalities in this country;" and concludes as follows:—"The Mayor, who has at present the power of appointing the School Commissioners, is primarily responsible for appointing such members as will endanger our public schools, and we have resolved to support only such candidates in future as will lend their influence for the benefit of our public schools, and whom we know to be enlightened and upright friends of the most liberal development of our public school system.

HUGO GORSCH, President.
JOHN C. BOECHEL, Treasurer."

This was rejected at once by the majority of the Board as an improper and impertinent communication.

COMMISSIONER FULLER'S REMARKS.

When the long list of petitions had been disposed of Commissioner Fuller addressed the Board. He said that he had made up his mind to say no more on this question of the German in our schools, but the action of the Germans in sending to the Board all these petitions and communications had caused him to change his mind. As far back as January, 1874, this question was before the Board. A good deal of bad blood had been occasioned by this question; but why? It was because the Germans had advocated their views in an offensive manner. Mr. Fuller then read from the City Superintendent's report for 1860, in which it was explicitly stated that the introduction of the study of German in the public schools was detrimental to greater proficiency in the English branches. He believed in having German or French taught in the Normal College or the College of the City of New York, but not in the public schools. German should never have been introduced into our public schools. By and by at the rate we were going on we would have German taught in the schools first, then English and next French—the French last, of course. We would not submit to the constant warning that we should lose 20,000 German children if we took the German teachers out of the schools, nor to such communications as that which appeared in the HERALD yesterday, signed by taxpayers representing $15,000,000. We meant to Americanize our schools, and not to Germanize them, nor would we be dictated to by any foreign element, by any class or creed. We wanted no special legislation, and woe to any class or sect that tried to injure our public schools. The holding up of votes to us would not bully us. Mr. Fuller then explained that in Germany the public schools, so called, were in fact pauper schools, the parents of children who are able to pay being obliged to pay. In conclusion he stated that three-fourths of even the Germans themselves were opposed to the German in the schools as the Board had been petitioned for it, and certainly nine-tenths of Americans were strongly in opposition and equally resolved to protect our school system at all hazards. There could not be two great national languages among us at the one time, and the American language, which was the commercial language of the world, should be sustained.

COMMISSIONER MATTHEWSON'S VIEWS.

Commissioner Matthewson then said:—The schools are in the hands of the people and are the people's property, and we can with safety leave them to the people. In no competitive examination between the schools have the children of German parentage ever led the van, but go into the German districts and see who carries off the palm in English studies. One-third of the children going to school in the city are of German parentage, and they ask for German in the schools as a representative portion of the community. But from eighteen to twenty per cent only of the pupils ever reach the three higher grades, and therefore but eighteen per cent of the pupils will ever have the great advantage of learning what is now one of the most useful acquirements. But to return to the original question, the people will defend the public schools and not the Commissioners of this Board.

After some remarks from Commissioner Beardslee, the President here stated that a committee had called on him on the 31st of January to ask for a postponement of the question for some time, but he thought, as it had been in abeyance since June 2, 1875, it was time it was disposed of.

Commissioner Matthewson—What are the names of that committee?

The President directed the Clerk to read them out.

They were Moritz Ellinger, Julius Bien, William Steinway, Theodore G. Glanbershlte, J. H. Fascher, Dr. H. Gercke and Oswald Ottendorfer. Commissioners Klamwrth, Traud, Wetmore, Beardslee, Matthewson.

The original report was then taken up in sections and voted on.

Commissioner Wilkins then moved the previous question, which was Commissioner J. Grenville Kane's resolution to bring up the report.

Commissioner KLAMROTH—I hope the gentleman will excuse me for five minutes and that he will not apply the gag law.

Another Commissioner then moved to adjourn.

Commissioner KLAMROTH—Can we not postpone this matter for the present?

Commissioner WOOD—The previous question is in order.

It was put, and carried by a vote of 13 to 5.

SEC. 39.—Teachers of vocal music, drawing, French and German shall be classified as special teachers. No salary paid to a teacher of vocal music or drawing in a grammar or primary school, or to a teacher of French or German in a grammar school, shall exceed the rate of $1 75 per hour for the time actually employed in instruction.

Adopted by a vote of 14 to 4.

SEC. 79.—Amend section 79 so as to read as follows:—Sec. 79. The City Superintendent, under the direction of the Committee on Teachers, shall be authorized to license teachers specially to give instruction in French or German in each of the three highest grades of the grammar schools, and the number of recitations in each of the grades pursuing the study of either of these languages shall be four, of twenty-five minutes each per week, and no pupil shall be permitted to pursue the study of more than one of these languages at the same time.

Adopted by a vote of 13 to 5.

SEC. 76.—Whenever the parents or guardians of at least thirty pupils attending a grammar department shall desire the introduction of French or German, the trustees of the ward shall introduce the study of such language in said department, but no child shall be compelled to study German or French contrary to the wishes of its parents or guardians, expressed either personally or in writing, and whenever the average attendance of pupils engaged in the study of French or German in any department shall fall below fifteen for the period of three months such study shall thereafter be discontinued in said department.

Resolved, That it be referred to the Committee on Course of Study and School Books, to report at the next or succeeding regular meeting of the Board a course of instruction in the French and German languages which shall comprehend, in three divisions, such a course of French and such portions of the course of German given under section 81 as shall by them be deemed suitable for the instruction in French or German of the third, second and first grades of the Grammar Schools.

Adopted by a vote of 14 to 4.

The whole report was then put before the Board and was adopted by the following vote:—

YEAS—Commissioners Place, Baker, Goulding, West, Caylus, Kane, Halsted, Walker, Fuller, Kelly, Dowd, Wood, Wilkins, Noes, Wetmore, Traud, Klamroth, Beardslee and Mathewson—19.

After the German question was settled, much to the general satisfaction of the Board, the financial statement of the Board of Education for the year 1875 was read and adopted, as also a number of other communications from over thirty different societies.

FINANCIAL STATEMENT OF THE BOARD OF EDUCATION FOR THE YEAR 1875.

Resources.

Amount apportioned for "Public Instruction" by Board of Estimate and Apportionment	$3,583,000
Amount retransferred by Board of Estimate and Apportionment from the fund of 1874	70,000
Total	$3,653,000

Payments.

Expenses of compulsory education	$14,350
Support of the Nautical School	22,497
Salaries of teachers in ward schools	2,235,751
Salaries of janitors in ward schools	121,018
Salaries of teachers and janitors in normal schools and college	82,539
Salaries of teachers and janitors in the evening schools	89,456
Salaries of teachers and janitors in the colored schools	40,568
Incidental expenses—Current repairs, clerks to trustees, &c	54,516
Expenses of the Board of Education—Stationery, advertising, repairs to hall, printing, &c	18,853
Employés of the Board of Education—Salaries, superintendents, clerks, &c	78,171
Fuel for all the schools	87,889
Gas for all the schools and the hall of the Board	14,562
Workshop—Wages and materials	1,506
Pianos and repairs of	4,755
Depository account—Books, maps, stationery and general supplies for all the schools	162,843
Rents for school premises	51,555
Expenses Normal College and schools—	
For scientific apparatus and chemicals $2,553	
For current repairs, printing, stationery, &c 3,309	
For storm doors 470	
	6,333
Expenses of evening schools, printing, &c	1,850
Expenses of colored schools, current repairs, &c	627
Total	$3,089,647
Site on Seventy-fifth street, in Nineteenth ward	6,000
Erecting buildings	7,000
Altering and repairing buildings, special	83,846
Furniture and repairing, special	29,955
Heating apparatus and repairing, special	51,533
Total	$3,267,981
Corporate schools apportionment for 1875, as per reports of Finance Committee of 21st April and June 16 (folio pages 289 and 446)	103,000
Total	$3,371,094
Balance with the Comptroller DECEMBER 31, 1875	$281,905

Appropriations for the year 1876 by the Board of Education, viz.:—

For salaries of teachers with grammar and primary schools	$2,265,000
For salaries of janitors of the grammar and primary schools	123,000
For salaries of professors and others in the Normal College	84,000
For salaries of teachers in the evening schools and janitors of	110,000
For salaries of teachers in the colored schools and janitors of	40,000
For salaries of superintendents, clerks and other employés of the Board of Education	78,000
Total	$2,700,000
For books, maps, slates, stationery and general supplies for all the schools	$180,000
For fuel for all the schools and the hall of the Board of Education	95,000
For gas for all schools and the hall of the Board of Education	18,000
For rents of school premises	55,000
For pianos and repairs of	5,000
For workshop, wages and materials	1,500
For incidental expenses and current repairs to buildings, furniture and heating apparatus by the ward trustees, including compensation for clerks of boards of trustees	59,000
For Normal College and Training School for supplies, printing, furniture repairs or for fitting up buildings, furniture and apparatus	7,000
For evening schools for incidental repairs, stationery, printing, &c	1,500
For colored schools, for incidental repairs, stationery, printing, &c	1,000
For incidental expenses of the Board of Education, for repairs to hall, and for printing, advertising, stationery, &c	20,000
For the enforcement of the act entitled, "An act to secure to children the benefits of elementary education," passed May 1, 1874	22,000
For support of the Nautical School, established by act of the Legislature, passed April 24, 1873	35,000
Total	$3,200,000
For corporate schools, State apportionment, per acts of the Legislature	103,000
Total	$3,303,000
"For purchasing, leasing and procuring sites and erecting buildings, furnishing, altering, &c., &c.," "set apart and reserved"	$350,000

Commissioner Goulding moved the following preamble and resolution, which were referred to the Committee on Normal College:—

Whereas public attention has been called to a certain text book, published by authority of the Board of Education of the city and county of New York, known as "Literary Selections for the Normal College," which contains a passage at 459, commencing "Corrupt as the Church of Rome was;" and whereas the same may be deemed offensive to the religious sentiments of a large section of our community and prejudicial to the efficiency of the common school system by impairing public confidence in the broad and liberal principles upon which that system was established and is now conducted; therefore,

Resolved, that the text book known as "Literary Selections for the Normal College of the City of New York," and now in use in that institution, be and it is hereby expunged from the list of text books, and its further use in any college or school under the jurisdiction of the Board of Education of the city and county of New York is hereby prohibited.

After the transaction of some routine business the Board adjourned.

THE CONTEST BETWEEN COMPTROLLER GREEN AND THE BOARD—WHO HAS THE RIGHT TO DISTRIBUTE SALARIES.

A discussion has arisen between Comptroller Green and the Commissioners of Education relative to the dispensing of funds for expenses of that department. Yesterday the following correspondence, bearing upon the subject, was given out for publication:—

PRESIDENT WOODSON TO THE COMPTROLLER.

OFFICE CLERK OF BOARD OF EDUCATION, NEW YORK, Jan. 20, 1876.

HON. ANDREW H. GREEN, Comptroller, &c.:—

SIR—I forward herewith a certified copy of a resolution adopted on the 19th inst. by the Board of Education, making a requisition on you for funds to be applied by the Board in payment of the obligations incurred by it. This action was taken in conformity with the opinion of the Counsel to the Corporation, recently submitted to this Board and to yourself, to the effect that this Board is legally the controller of the funds apportioned for the purpose of public instruction. Please inform me at what date the money asked for will be deposited with the City Chamberlain. Very respectfully, &c.,

WILLIAM WOOD,
President of the Board of Education.

COMPTROLLER GREEN TO THE BOARD OF EDUCATION.

FINANCE DEPARTMENT, COMPTROLLER'S OFFICE, CITY OF NEW YORK, Feb. 1, 1876.

TO THE BOARD OF EDUCATION:—

I have carefully considered a communication from the President of the Board of Education, dated 20th January, and the opinion of the Counsel to the Corporation alluded to therein. The latter refers to certain decisions relative to the respective liabilities of the city and the Board of Education or College of the City of New York, as controlling the opinion. Without these supposed decisions it is quite apparent, from a reading of the opinion, that the Counsel to the Corporation would be unwilling to sustain the ground taken by the Board of Education as expressed in their resolution, which is enclosed in your communication. On examination it appears that those decisions are not upon the direct point involved in this resolution of the Board of Education. As this subject relates to an annual expenditure of more than $3,500,000, and the existing course of proceeding in the audit and payment of claims incurred by the Board of Education has been pursued for nearly three years with the acquiescence of all parties, and as a departure from this course would be subversive of a system which was intended to reform, and has to a great degree already reformed, the previously existing irresponsible and loose methods prevailing in the affairs of the city, I should feel a very great reluctance to assent to any change, unless it was very evident that the law required it; and as the Board of Education, or at least some of its members, seem to desire to have the system changed by an application to the courts, I shall facilitate any action to procure an adjudication that will settle the question both for the Board of Education and the Finance Department at the earliest possible day; and meantime, in order that no inconvenience may accrue to teachers and others having claims, will continue in the usual manner to pay their salaries and claims when certified to me by the Board of Education. Respectfully,

ANDREW H. GREEN, Comptroller.

ADULTERATED MILK.

A BATCH OF SPOILERS OF THE LACTEAL FLUID MULCTED IN THE COURT OF GENERAL SESSIONS.

Twenty-six milk dealers were tried yesterday in the Court of Special Sessions before Justices Duffy, Bixby and Wandell. The charge against them was that they had adulterated the milk they sold. Messrs. Hastings and Colonel Prentice appeared to prosecute on behalf of the Board of Health, and Messrs. Waener and Lawrence conducted the defence. The first case called was that of Francis McCarman, of No. 122 Mott street. Officer Gardner testified that he examined the milk sold at the place in Mott street and that the lactometer showed it to be but eighty degrees, or twelve degrees below the required standard. The witness, however, failed to prove that the accused had any proprietorship in the shop where the milk had been sold, and the case of Francis was dismissed. Then Frank Lubban, of No. 10 Oak street; John Haase, of No. 284 Mulberry street, and John Jaeger, No. 81 Norfolk street, pleaded guilty to the charge, and were mulcted in the sum of $50 each. In the case of John Juechler Officer Gardner testified that he had tested the milk found on the defendant's premises; it registered eighty-eight degrees on the lactometer, the temperature being fifty degrees Fahrenheit; he took the sample, bottled, labelled and delivered it to Professor Waller for analysis.

Professor Charles F. Chandler, President of the Board of Health of this city, was the first scientific witness examined. He said that after careful analysis and repeated experiments he had decided that the lactometer is an infallible test of the quality of milk. He gave a detailed account of the method adopted by the Board of Health for testing milk, describing the lactometer and the gradations under which the milk was tested. He showed that the milk produced by the cows in the vicinity of New York, and from which the supply is generally taken, ranged as high as 129 degrees by the lactometer, whereas the milk sold by the accused was as low as 88.40, several degrees below the limit fixed by the Board. The lactometer used by the Board of Health was more favorable to the milkmen by ten degrees than the one used by themselves for the purpose of testing milk received from the producers.

Professor Henry Morton, President of the Stevens Institute, explained his experiments with the lactometer, which, he said, is a hydrometer graduated to measure the specific gravity of milk; the standard adopted by the Board of Health of 1,029 of the hydrometer, as compared with 100 of the lactometer, is the standard. Milk that ranged at the standard of 88 degrees by the lactometer at the temperature of 60 degrees Fahrenheit, could not be pure, and must have been mixed with some adulterating substance. He had never known pure milk from a healthy cow that would range lower than 100 on the lactometer used by the Board of Health. To secure a correct test the thermometer and the lactometer were generally used together, and reasonable care was also required. If several cases of milk taken from healthy cows should range less than 100 it would destroy his faith in the instrument.

The witness was closely cross-examined as to the conditions under which milk of a lower range than 100 might be produced from an apparently healthy cow, and stated that impurities might arise from the accidental mixture of foreign substances with the milk through carelessness, but with proper care pure milk would range higher than 100.

Professor George F. Barker, formerly professor of chemistry in Yale College, but now of Philadelphia, described the method of finding the specific gravity of pure milk from the cows by using the hydrometer and the lactometer, and said that an indication of 1,029 degrees on the hydrometer is equal to 100 degrees on the lactometer. Each instrument must be tested separately to give accurate results. If any sample of milk should stand below 100 degrees on the lactometer such milk could not be pure.

Officer Gepson testified that he had received instructions from the proper authorities connected with the Board of Health, which enabled him to use the lactometer correctly. He had tested nine or ten samples of pure milk, and the lowest specific gravity of any of them was equal to 102 degrees.

Professor Elwyn Waller, formerly of Harvard University, testified that he possesses a special knowledge of chemistry and understands how to make a test for pure milk; the evidence given by the scientific gentleman who had preceded him agreed with his own experience; the lactometer of the Board of Health is a sure test for the pressure of water only; if the lactometer showed less than 100 degrees specific gravity the milk so tested would not be pure; if at 50 degrees Fahrenheit the lactometer showed a sample to range below 100 degrees this would be proof positive of the undue pressure of water. Here the witness went into a description of the component parts of pure milk. Dr. Waller stated that in last September he visited several dairies in Orange county and made a number of tests with the lactometer; he had experimented with samples of milk from eighty-five or eighty-six cows, and the lowest grade indicated by the lactometer was 102 degrees; milk from Alderney cows had also been tried and none of it registered a lower degree of specific gravity than 102.

Casper Goldmann testified to the publication in three daily newspapers of the ordinance under which the prosecution was made. A copy of the law, certified by the secretary of the Board of Health, was admitted as evidence of the existence of the law.

The defendant (Juechler) testified that he received the milk without knowing what it contained.

John Meyer, who sold milk to the defendant, testified that he did not adulterate it.

The Court found the defendant guilty of the charge, and sentenced him to pay a fine of $100, with costs—an order which he promptly obeyed.

When the other milkmen who were present heard the decision in Juechler's case, they resolved to plead guilty and get off on a fine of $50 each. The names of those who availed themselves of this privilege are:—John Rohs, No. 522 Ninth avenue; John Jaeger, No. 81 Norfolk street; Henry C. Meyer, No. 756 Tenth avenue; Martin Brunings, No. 129 Ninth avenue; Henry Brinkerman, No. 879 Third avenue; Michael Schroeder, No. 96 Oliver street; Martin Joost, No. 413 Greenwich street; Peter Hays, corner Seventh avenue and Twenty-sixth street, and Frederick Hencken, No. 350 Eighth avenue.

MOODY AND SANKEY.

The alterations necessary for the proposed religious meetings to be held in this city by Mr. D. L. Moody and Mr. Ira D. Sankey, are almost completed. The building at the corner of Twenty-sixth street and Fourth avenue will be thrown open for inspection this evening at eight o'clock, when a full rehearsal of the choir will take place.

THE CONVERTED ACTRESS.

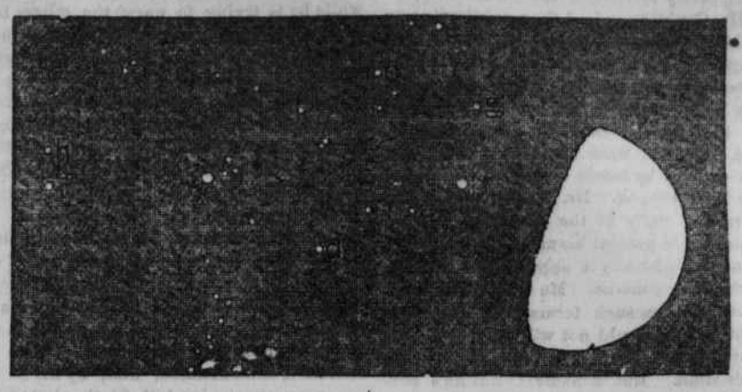
TO THE EDITOR OF THE HERALD:—

I am very sorry to see that the HERALD, as well as other journals of New York, when speaking of the lady evangelist, Mrs. Lowery, invariably use the expression, "converted actress." Surely the time has gone by when actors were considered as any worse than other people. You never speak of a converted milliner or dressmaker, or of a converted doctor, lawyer or shoemaker, or even of a converted editor, though I presume there have been such. Why, then, select a profession of which no more orderly citizens can be found, to speak of as though they were specially criminal? Converted burglar or converted thief, if you will, but do not include actors in your category of people who need be considered as especially wicked. Respectfully yours,

J. B. R.

NEW YORK, Jan. 31, 1876.

OCCULTATIONS OF THE PLEIADES.



TO THE EDITOR OF THE HERALD:—

We may well hope for a clear sky all over the country this evening, for otherwise we shall lose the opportunity, which may not again occur in a lifetime, of witnessing the phenomenon, under its most advantageous circumstances, of the occultation of the principal stars of the Pleiades. The above diagram represents the phenomenon at 9h. 26m. 50s., when it is predicted that the bright star *b* will disappear behind the dark edge of the moon. The dark line, dimly seen, passing from the moon's centre toward the opposite corner of the diagram, represents the direction of the moon's motion, and the stars in its path will successively disappear with a suddenness which will be all the more startling if the eye is fixed upon the star and the bright portion of the moon is kept out of the field. In order that the moon may not be too bright it is desirable that it should not be too near the full. On the other hand, in order that the occultations may be visible over a large extent of country, it is necessary that it should not be too near the new. Occurring in February we have the happy mean between these two extremes, and even the hour of the day is so nicely adjusted that, while on the Pacific coast, an hour earlier would have caused the daylight sadly to interfere, on the Atlantic coast an hour later would have brought the moon so near the horizon that the later contacts would have been lost. Let me first give some idea of the reasons which induce astronomers to look upon the occultations of the Pleiades under such circumstances as this evening with peculiar interest.

In navigation it is necessary that the position of the ship should be known both in longitude and in latitude. The latitude is easily obtained from the meridian altitude of any known star, because the direction of the axis of the earth is fixed, but the longitude is obtained with difficulty, the meridian of Greenwich, from which the longitude is reckoned, as well as the meridian of the observer, being in motion at the rate of about 1,000 miles per hour. It is easy to determine the position of any meridan among the stars, which is the local time. But the difficulty is to determine on any other meridian what is the local time at Greenwich. The most accurate means of determining the longitude of distant stations is by telegraph signals. If, at 5h. 0m. P. M., local time in New York, a signal by the cable indicates that it is 9h. 56m. P. M. at Greenwich, we know that our longitude is 4h. 56m. west of Greenwich. When, as at sea, there are no means of direct signals, a chronometer is relied upon to give Greenwich time. If the chronometer ran with accuracy, the sea captain, on arriving in New York, would find that his chronometer indicated 9h. 56m. when the City Hall clock indicated 5h. 0m. But no chronometer runs with perfect accuracy, and a century or two ago they were far less reliable than now. As a check upon the chronometer, the changing place of the moon among the stars has been generally resorted to. The motion of the moon being thirteen degrees per day or more than half a degree an hour, sea captains observe "lunar distances," the apparent distance of the moon from the larger fixed stars along its path and obtain from the nautical almanac the Greenwich time at which the moon is predicted to be at the observed distance. It is true that the moon would not appear in exactly the same place among the stars at the same time, as seen from two different stations, but this difference, from parallax, as well as the smaller difference from the refraction of our atmosphere is allowed for in the calculation. These corrections reduce the observed position of the moon to its position as "supposed to be seen from the earth's centre." We should most naturally suppose that from the earth's centre the moon could not be seen at all, but this expression, which has been made the subject of much criticism, refers to its position as it would be seen from any point on the line between the moon and the earth's centre.

This method is not sufficiently accurate for the needs of astronomy, and it is common to employ the method of moon culminations, which gives the moon's place as nearly as it can be measured in the telescope. The time of the moon's passing the meridian is accurately observed, and also that of a neighboring star. From the latter the local time is known or verified, and from the former the local time at Greenwich may be obtained by computing at what Greenwich time the moon would be in the observed position among the stars. A great advantage of this method is that as both the star and the moon are observed in the meridian, neither refraction nor parallax affect their position in right ascension, and consequently no correction has to be applied to reduce the observations to the earth's centre.

It is obvious that at the instant when a star is occulted by the moon its distance from the moon's centre is exactly one-half of the moon's diameter. As a bright star disappears behind the dark limb of the moon with suddenness it is easy to obtain the distance of the moon from the star with as much accuracy—with no other instrument than a sextant, with which to obtain the local time, and a small spyglass, with which to observe the occultation—as it can be obtained with the transit or meridian circle of the observatory by the method of moon culminations. Occultations of stars by the moon have, therefore, long been a favorite means of determining the longitude even of fixed observatories.

Were the moon a perfect sphere or a perfectly regular spheroid, probably occultations would have retained their pre-eminence, notwithstanding the additional complication of the computations. But when a star happens to be obscured by a lunar mountain before its time, or when it happens to descend into a lunar valley at the edge of the disk and remains visible too long, in either case there is an inaccuracy in the result. In the former case there may be an uncertainty whether some terrestrial cause may not have caused the too early disappearance; but in the latter case, if the time is certainly known, we can only refer the cause of the visibility of the star to a depression in the disk of the moon itself.

If the moon always turned precisely the same face toward us we might determine on what parts of the moon's limb the mountains or the valleys were to be found, and make allowance for them, although it would be a slow process and require very many observations; but the difficulty is immensely increased, almost beyond the limits of possibility, when we take into consideration the libration of the moon, so that the mountain which to-day occults a star may to-morrow have been carried either beyond the edge of the disk or brought so far toward us as not to project at all. For the motion of the moon is not like that of the ball representing it in the orrery, rigidly fastened to a wire and compelled to keep the same face toward the earth; but the moon is freely poised in space, and appears to swing back and forth like the rolling of a ship. This is its apparent motion with respect to the earth, arising from its varying orbital velocity, combined with a perfectly uniform velocity of rotation. When the moon is near us and moving most rapidly, the western side comes more and more into view, and in the opposite part of its orbit, while moving slowly, the eastern side comes more and more into view. Before corrections can be applied for the lunar mountains or valleys their exact positions and dimensions must be ascertained, and then it must be also ascertained in precisely what stage of libration they are upon the moon's limb. So hopeless has it seemed to undertake this that I am not aware that it has yet been attempted.

The chances of error are much diminished when several contacts are observed within a few hours, and especially when the moon passes centrally over such a group of stars as the Pleiades. The hastening of one contact by a mountain will be counterbalanced by the delay of another by a depression, so that the average result will be very nearly the same as if there were neither mountains nor depressions. There are other advantages scarcely less important. Astronomy has not yet reached such a position that predictions can be as accurate as observations. The moon may be at the time of the occultation a little further east or west than was predicted; it may be a little further north or south; it may be a little further from us or nearer to us, varying its parallax and apparent semi-diameter; and its motion in longitude, in latitude, and radially, may be somewhat different from that predicted. If a sufficient number of observations are made all these inaccuracies of prediction can be corrected by the observations, and eliminated. When the moon was last traversing this group, nearly twenty years ago, large numbers of observations were made by officers of the Coast Survey and by others. When a phenomenon so interesting in itself as an occultation is repeated a dozen or twenty times in succession it will always and necessarily attract sufficient attention to secure the requisite observations.

In the annual report of the United States Coast Survey for 1855 Professor Peirce calls special attention to the occultations of the Pleiades, which were then to occur, and gave the formulæ by which they could be used "for correcting the lunar semi-diameter, the mutual positions and changes of position of the stars of this group, for testing and correcting the formulæ of lunar parallax, for determining the irregularities of the moon's limb, and, finally, for correcting the longitudes of the places of observation." The whole group of stars whose places were accurately determined by Bessel consists of fifty-three, of the ninth magnitude and brighter. Of these thirty-one will be occulted in New York city, furnishing sixty-two contacts to be observed. The disappearance behind the dark edge of the moon may be easily observed, even with an ordinary telescope; but the reappearance of the smaller stars from behind the moon's bright limb will require a good telescope and a previous knowledge of the time and place at which the reappearance will take place. The place can be learned from the above diagram, and the time for New York city is given in the following table. It will be observed that several times during the occultations there will be two or more contacts so nearly together that it is uncertain which will first occur. It so happens that in each case, in this city, it is probable that the immersion of the one star will occur before the emersion of the other. The principal star, Alcyone, Eta, is indicated in the table by A, and in the diagram by the Greek character resembling *n*.

Star.	Immersion.	Emersion.	Star.	Immersion.	Emersion.
g	9:46	10:26	*p*	10:43	11:43
b	9:27	10:38	22	11:01	11:20
1	9:42	10:51	24	10:50	11:50
3	9:47	10:57	A	10:44	11:46
4	10:11	10:49	27	11:11	12:05
6	10:05	10:56	29	11:19	12:13
c	10:23	10:50	*f*	11:36	12:21
7	9:57	11:21	*h*	11:33	12:28
8	10:10	11:13	31	11:42	12:31
9	10:11	11:14	32	11:48	12:34
d	10:15	11:06	33	11:38	12:37
10	10:20	11:21	35	11:52	12:45
11	10:20	11:24	36	11:54	12:47
13	10:36	11:26	37	11:58	12:50
15	10:41	11:42	39	12:23	12:53
18	10:42	11:43			

For any other place within one or two hundred miles of New York city, a correction must be applied for the difference of longitude, and also for the difference of latitude, which may be obtained for the principal stars from the following table, the result being the local time:—

Star.	Immersion. Diff. 1 deg. Lat. N. Min.	Immersion. Diff. 1 deg. Lon. W. Min.	Emersion. Diff. 1 deg. Lat. N. Min.	Emersion. Diff. 1 deg. Lon. W. Min.
g	2.7	5.6	3.8	4.3
b	0.0	5.5	1.2	4.9
c	7.0	6.0	8.0	4.0
d	2.3	4.7	0.7	5.2
A	1.4	4.8	0.5	4.6
f	2.5	4.1	0.4	4.8
h	1.6	4.3	0.4	4.4

For example, Boston is 1½ deg. north and 8 deg. east from New York. The star *g* will disappear in New York at 9h. 45.8m. Adding 4.0 minutes for the difference of latitude and 16.8 minutes for the difference of longitude, the disappearance at Boston will be at about 10h. 6.6m. But *c* will only be occulted a short distance to the north of New York, the limit passing nearly through Hartford, Conn., and Kingston, N. Y., so that there will be no means of determining with reasonable accuracy the time when it will disappear at any given place, except by careful computation. The times for the smaller stars shown upon the diagram and for the seven stars to the left of *h* and *f* may be estimated from the above data with sufficient accuracy to observe the immersions; but the immersions of these smaller stars can only be well seen with a large telescope.

I have already referred to the effect of mountains and depressions upon the moon's edge. Attention has recently been called to remarkable depressions in the moon's western limb, near the Equator, to which have been given the name of the discoverer. In the monthly notices of the Royal Astronomical Society, vol. 24, No. 1, Rev. Henry Cooper Key announces his discovery, and furnishes a diagram, of which the following is a copy:—

KEY'S FLATTENINGS, SEPTEMBER 20, 1863.