THE LECTURE SEASON.

Dr. Baird's Lecture at the Brooklyn Female Academy—Subject, History of Germany and Hungary.

The lecturer opened his discourse by a recapitulation of the latter portion of his preceding lecture, referring to the political and social condition of Sweden and Norway. He considered that the long constitutional existence of these countries fitted them more than any others in Europe for a republican form of government. They have their own armies and navies—have the advantages of education—all the inhabitants being able to read and write, and are accustomed to meet in their townships and consult together as to the operation and tendency of the laws. The Norwegians in olden times were in the habit of meeting *en masse* in the valley of Upsala, to elect a king, who was then consecrated by pouring oil on his head in the Oriental fashion. This practice has been discontinued for several centuries, but it is very interesting to visit those coronation stones which are still preserved. Not far from this valley are also the tombs Odin Thor and his daughter. Denmark has a navy quite as large as ours, and that of Sweden is still larger. The navy of Norway is small, and in this country and Sweden they have, as yet, no railroads. The army of Sweden and Norway numbers forty thousand men, and that of Denmark fifty thousand. Denmark has now a constitutional monarchy which will, in process of time, become a good one. As to Sweden their form of government is very antiquated, and yet they understand constitutional government, and are very nearly prepared for universal suffrage, for which Norway is also quite prepared. Now as to Germany. You are aware it is a very large country, and contains forty or fifty millions of a population, which are of Teutonic origin. It may be convenient for France to talk of extending her boundaries to the Rhine, but rivers are not the boundaries of nations. On the contrary, it will be always found that the people on both sides of rivers are of the same race, and, therefore, the Germans with good reason call the Rhine "our river," and are very proud of old Father Rhine. As to Austria, it has no more than nine millions of people that speak the German language, and yet the government is emphatically German, and the empire is ruled by the House of Hapsburg. Thirty-seven millions of people are thus really governed by nine or ten millions—five millions of Poles, and fifteen millions of Hungarians, (none of whom are Germans, with the exception of about a hundred thousand, the descendants of a German colony which went into Transylvania in the eleventh century, and who speak the old Saxon language, and call the colony Saxon Land), and five millions of people in Italy and Lombardy, and about twelve millions more of Sclavonic races, are governed by Austria. It is strange that such a state of things does exist; just imagine twelve and a half millions of Germans (including all the population of Moldavia and Bohemia) undertaking to govern the rest of that empire. It cannot last long. Five or six years ago, when I was here before, I said that that empire must soon come to an end—that it was doomed to perdition. The House of Hapsburg is the most wicked house in the world, and the day of vengeance must come, and that empire must be broken to pieces. The German party will coalesce with the Germans, and the other parties will look out for themselves; Hungary will gain her own independence; Gallicia go back to Poland; and Lombardy and the Austrian possessions in Italy go back to Italy. Austria may hold them together for a while longer, by keeping up an immense army, but its existence cannot last to the end of the present century. I did not think, five or six years ago, that such tremendous disturbances would come so soon, but I am quite sure that before ten years pass away the disturbance will come again, and it will this time be an effectual one. As to Germany, it contains thirty-seven different States, taking in Austria and Prussia, and the small kingdom of Bavaria, with its four millions of inhabitants, and the small kingdom of Wurtemburg, with its two millions, and the little kingdom of Saxony, with its one and a half millions, and the kingdom of Hanover. Germany has thus six kingdoms; but Prussia and Austria are the most important, and really domineer over all Germany. Take away these six monarchies, and you have four free cities, which are little republics in themselves—these are Lubeck, Frankfort, Bremen and Hamburg, which are the remains of the old Hanse cities, and are mixtures of aristocracy and democracy—they are very well governed, but the machinery is antiquated. Take away these four free cities and add them to the six kingdoms, and then you have ten distinct sovereignties. Besides these there are twenty-seven dutchies in Germany—there had been twenty-eight, but one of them has been absorbed into Prussia. Now, when you think that Germany is not one-sixth part as large as the United States, and that it has a great many governments in proportion to its extent, what would you say when it had, about fifty years ago, not thirty-seven, but three hundred and fifty-four governments. These little governments are gone—Prussia has swallowed up a great many of them, and so have Austria, Bavaria and Wurtemberg. If the Germans do not unite all these people under one government, either a constitutional monarchy, or good republic, if they do not bring that about very soon, all I have to say is that the Germans are a very contemptible race. If a nation like the Germans, with intelligence, courage and virtue—and one-half of them, too, Protestants—are willing to be slaves, and submit to have thirty-seven governments over them, they are worthy of it; but they will not remain so—they will throw off the yoke, and enter into a protective confederation. As for wishing to form a great empire of Germany, (such as they talked of in 1848,) like to the old one, and to place an emperor over the head of these thirty-seven different governments, I never heard anything so absurd, nor could anything so ridiculous enter into the head of sensible men—it is simply not possible—it may suit German metaphysicians and dreamers to imagine such a government, but it cannot suit practical understandings. No; the people must sweep overboard the whole of the governments altogether, and if the people don't know what to do with them, let them be sent over here, and taught to work. I have sometimes thought that if Joseph Bonaparte had lived longer, he ought to have kept a boarding house, and entertain his European friends in Bordentown. As to Hungary, it is a most remarkable country in its physical appearance, having mountains forming its northern and southern boundaries. Dr. Baird pointed out on a large chart the topographical position of the Carpathian range of mountains; the courses of the Danube, Theiss, &c. The land is exceedingly fertile, and they have minerals and salt mines in great abundance. He next adverted to the early history of Germany. When the Romans came in contact with the Germans, the country was covered with forests and poorly cultivated—the inhabitants were a warlike people, and cared more for their horses and cattle than for agriculture. They were a very brave, fine looking people. The description which Julius Cæsar gave of them in his "Commentaries," will hold good to this day. Tacitus has also described them with great accuracy. They were then the same blue eyed and white haired race as they are now. When Julius Cæsar went to conquer Gaul, he found that the Germans had just begun to cross the Rhine. They came over to assist the Gauls against the Romans, but in fact to dispossess the Gauls. Julius Cæsar undertook to drive them back, and crossed over to Germany and fought two or three battles with them—but he made no long stay there. After his day, the Romans went on with the work and conquered them. The Germans were then commanded by Arminius or Hermann. The Romans held the country for five hundred years, and introduced laws and civilization, but very few Roman families ever emigrated to Germany, it is worthy of remark that the Romans went to Germany via Gaul. The Sclavonians drove the Romans out of the valley of the Danube what is now Hungary, and finally from Germany itself. At last a master appeared who controlled all these races, and that was Charlemagne, who held his court in Aixlachapelle, where he is buried and where his throne is yet to be seen. In Charlemagne's time there was a great deal to be done in Christianizing the Saxons. Charlemagne compelled them to be baptised in the rivers *en masse*. Charlemagne died and left his vast empire to his three sons, one of whom reigned in Germany, one in France, and one in Northern Italy. The House of Hapsburg commenced to reign about the year 1300. They are a Swiss family, and even to this day they own property in the North of Switzerland. A branch of this family having removed to Austria, one of its members, Rudolph, was elected Emperor, and his son Albert succeeded him. The Emperor of Germany was then at the head of the Germanic Confederation. The Diet consisted of some thousand members—landgraves, nobles, palatinates, bishops, and archbishops, &c. This Diet generally met in Ratisbon, but had no fixed place of meeting; for instance, they met in Worms, where Luther appeared before them to defend himself from the charge of heresy. They met also at Spires and at Augsburgh, where Melancthon appeared before them. This kind of confederation kept Germany quiet and prevented civil war. It was disturbed, however, in later times. They had wars with the Poles, and with the Turks, and also with France. This State was disturbed when the kingdom of Prussia arose, about 150 years ago. This house originated with the house of Brandenburgh. There have been six kings of Prussia:—The first was Frederick, who reigned in 1703. Prussia gradually became powerful, and Frederick had two wars, with the Emperor, and with the Empress, Maria Theresa. The lecturer then reverted to Hungary. The Magyars came in the ninth century, and wrested the country from the Sclavonians, whom they drove to the mountains, and treated as a conquered people for several hundred years. There is no question at all but that the Magyars ruled over them with a strong hand as a conquered race, and treated them with great injustice, as is always the case. The Magyars became Christians in the tenth or eleventh century, and were governed by a constitutional monarchy. King Andrew gave the people what is called "the Golden Bull"—a charter of rights, which is nearly as old as the English Magna Charta. They had a representative government, and a perfect Diet, consisting of two houses—the upper house numbering more members than the lower. In the olden time the Magyars were the only people who occupied places in the Diet; but in the late revolution the leaders were impressed with the injustice of their exclusiveness, and were determined to abolish all distinctions of races, and put the Sclavenians on the same level with themselves. Kossuth and other enlightened men saw that if anything were to be expected from Hungary none of the people should be governed as serfs, but raised up to the rank of freemen. Hungarian leaders in modern times comprehended well what was to be done. The monarchs for a long time had various capitals, but in a later time Presburg (which is near to Austria) was made the capital by the cunning of Austrian policy. You may wonder how did it happen that Hungary had anything to do with Austria. I will tell you. After maintaining an independent existence for a long time, the Hungarians had a tremendous war with the Turks, and in their last great battle they lost their monarch, Louis II. There was then no heir to the crown except a lady—the king's sister—who was to succeed him. She married, in 1526, Duke Ferdinand, brother to Charles V., Emperor of Germany, and who was, at the same time, King of Spain, under the title of Charles the I., and also King of the Netherlands. Charles abdicated his throne, and his brother Ferdinand, who was King of Hungary, was elected Emperor of Germany, so that he, at the same time, governed these two countries under different laws. He could not do as Emperor of Germany what he could do as King of Hungary. The house of Hapsburgh, after a while, got possession of Bohemia also. The Hungarians justly say that they came into Austria, not as a conquered people; and that Austria was nothing in comparison to Hungary and Transylvania. Ever since the Hungarians have been dreadfully oppressed and misgoverned, and I do not wonder that they felt aggrieved. But yet they were a brave and loyal people, and held up the House of Hapsburgh when it would have been otherwise ruined; and now you see how they have been treated in return for their bravery and loyalty. The lecturer then gave a discursive account of the social condition of these countries, the extent of the railways, the character and population of the principal cities—Vienna, Berlin, Hamburg, Munich, &c. Germany is a delightful country to travel in, if you know the language. Education has made immense progress in it, and all classes are intelligent. It contains twenty four universities, and all the cities have excellent scholars; but latterly these have been paying more attention to politics than to literature. He then reviewed the history of Prussia, and gave a succinct account of the three wars of Frederick the Great. The most remarkable and most disastrous war in Germany was the religious war, which continued for thirty years, and at its close, the population of Germany was reduced to one-fourth what it had been at its commencement. He adverted to the military talents and achievements of Gustavus Adolphus, King of Sweden. He abolished the old match-locks and introduced the flint locks, by which means the power of his army was increased threefold. He also had the bayonets placed on the side of the musket, instead of as heretofore, in the muzzle. After his wars came those of Frederick the Great, and subsequently the war of Napoleon. The victories of the latter in Germany he briefly narrated; Napoleon gained the battles of Marengo, Austerlitz, and Jena, and had the Prussian monarchy at his feet from 1806 to 1814. From the treaty of Paris, in 1814, Prussia had no war till 1848. The old German empire was overthrown in 1806, and never since restored. Francis II. then assumed the title of Emperor of Austria. The lecturer sketched the revolutionary doings of 1848, and the part which Kossuth played in them. He believed that Kossuth was not a Magyar—his mother was a German and his father a Sclave. As to Gorgey, there was no denying his great military talents, but he was jealous of the influence of Kossuth; instead of marching right on to Vienna, he spent time uselessly at Buda, and gave the Russians an opportunity to march their army of 150,000 men into the country. Even then he might have joined Bem and Dembinski in the South, and overcame their enemies, but, instead of doing so, he cut his way through the Russian army, and got himself into an inextricable position, where he had to surrender his army at Villargos, and the other leaders, Kossuth, Bem, and Dembinski, crossed over to Shumla, and solicited the hospitality of the Turks. He (the lecturer,) had been lately at Pesth, and he could assure them that Kossuth was extremely popular there, no matter what people may say to the contrary. He did not deny that Kossuth made some mistakes, but mistakes were unavoidable where everything had to be created by himself. Hungary had no army, no officers, and was so near to that great power of Russia. Had Russia been a thousand miles off, Hungary would have achieved her independence; or, if France had done what she ought to have done, and what she did do under Lamartine, in 1848, when she said to Russia, "you must not set a foot in Hungary," and the Emperor replied, "neither must you set a foot in Italy," do you think that Russia would have set her foot across the Carpathian mountains. Hungary was thus lost through the want of having a man at the head of affairs in France. There are seven millions of Roman Catholics in France, most of them noble people, and they stood nobly by Kossuth. More than half of his officers were Roman Catholics, among whom was Louis Batthyani. Gorgey, he was sorry to say, was a Protestant. The Sclaves throughout Hungary came into this struggle more than has been represented. Most of them joined Kossuth, but the Croats and the inhabitants of Sclavonia were opposed to him, on account of Austria fomenting disturbances among them. One of the most significant facts in favor of the Hungarian cause, was that the Jews rallied round it, though, in 1830, they refused to assist the Poles. A very remarkable thing in Hungary was, that the Russians were instructed by the Emperor to treat the people kindly, and they did so; and in consequence, the Hungarians have ten times as much respect for the Russians as they have for the Austrians. The lecturer then passed to the philosophy of reorganizing Germanic societies. He considered that every effort made to raise any class, must be one which has its beginning, and middle, and end, in the elevation of the persons themselves, and not of their political position. As the Jews in Europe and the colored races in America, if you take them up and let them mingle with us, you will not have elevated them. That which elevates a man is what changes himself, not what changes his place. Therefore, if there be a philanthropist who seeks to elevate them, he must go down to them, and bring them the light of the gospel, and teach and instruct them—develope their intelligence, skill, and moral power, and when men are thus developed, you need not trouble yourselves about their rank. It does not require divers to go down to the bottom and lift the cork—the cork will come to the top itself; and moral man asks no adventitious aid—he will always come to his right place in society. Therefore, the simple law of Christians is this—take away from every class every unlawful obstruction—bring out their education, the means of developement—and give them no favor and no hindrances. Educate them, and these things will take care of themselves; but all attempts to bring men up otherwise fail, because they are founded on a false philosophy.

Lecture on Temperance, by the Hon Charles H. Delavan—Appalling Picture o Great Britain.

On Thursday evening, the Hon. Chas. H. Delavan delivered an exceedingly interesting lecture on temperance before the Mechanics' Institute, at Clinton Hall. The meeting was respectably attended, and a goodly portion of the fair sex gave, by their presence, a stimulating influence to the cause. On the platform, near the lecturer, we noticed the President of the Mechanics' Institute, Doctor Peck, Colonel J. D. Harris, and Alderman Purdy.

Mr. DELAVAN having made some complimentary remarks upon the undoubted energy of the members of the city of New York Mechanics' Institute, proceeded to say:—Intemperance, in its most comprehensive use, denotes, as is well known, excessive indulgence of the senses, or of the faculties of the mind; while temperance may be fairly considered as that combination of moral propensity constituting general virtue, being just the degree of sensual and intellectual indulgence which is according with the designs of nature. Perhaps, of all the ephemeral races that have successively inherited the earth, from the day that Eden's gates were closed to the present time, not one individual, save the Messiah himself, has been an unqualified observer of the rules of temperance. All have been, and are in some degree intemperate in their indulgence of one or more particular inclinations, each having a passion of more or less inveteracy. The man, for example, who abstemiously governs his appetite for food and drink, may be intemperate in the exercise of his intellectual or physical powers; whilst he who governs both with discretion may be notoriously intemperate in his love of power, wealth, or fame. Many illustrations may be found in the biographical records of history, and even in the observations of every day's experience; but intemperance in the abstract is what I purpose to speak of this evening—namely: the intemperance of drinking. During the whole life of man, his physical constitution is subject to one continual change. He is not for one minute of his existence composed of the same atoms essentially, and in three score years and ten, it is calculated he changes his whole system ten times—that is to say, about once in every seven years. Every organ—every atom of the animal system participates in the actions of the body, and is consequently subject to wear and tear, and hence the necessity for the reproduction—for, were there none, the body must be reduced to a skeleton in a very short period—just as a garment through continual wear is made thin and threadbare, there being no means in it of supplying the portion of the fibre worn off. To replace this waste in the animal economy, food and diluents have been provided, and a complex system of organs and functions contrived to prepare and bring the food to the state required for entering into the composition of the living body. The principal organs concerned in this work are the mouth, stomach, intestines, liver, heart, and lungs; in the first the food is immediately brought in contact with the teeth, by which it is pulverized if dry, as bread, or cut or torn into fibrous particles if flesh. A flow of saliva or spittle always accompanies the process of mastication, which, mixing with the food forms it into a pulp, when it is passed down the œsophagus or gullet, and received into the stomach or organ which, in shape, has been compared to the belly of a bagpipe. Though death has been decreed against all flesh, the means of deferring or hastening it are at our command; as we sow, we expect to reap, and in like manner we must expect our physical frames to endure according to the mode we treat them; if we replenish them with poisoned air, poisoned fluids, and improper solids, we must look for an early and premature death; if the supply be of nature's purity we shall die, but naturally. Mr. Delavan proceeded to illustrate his lecture with plates, showing the effects of alcohol on the human stomach. The drawings presented a delineation of the principal morbid changes produced upon the stomach by intemperance, and which Mr Delevan hoped might have some effect in deterring the temperate from the use of alcoholic poison. These drawings were alternately placed beside a painting of a healthy stomach, in order to contrast the different phases of disease arising from the use of liquors. In respect to drink, said Mr. Delavan, water is the only fluid which does not possess vitiating or at least stimulating qualities, and in proportion as we rise in the scale of potation from table beer to ardent spirits, in the same ratio we educate the stomach and bowels for that state of natural sensibility which, in civilized life, will sooner or later intervene. It is by this moderate drinking that the appetite of the inebriate is first acquired, for by nature man has no taste or desire for alcohol. It is as unnatural and averse to his constitution, as to that of the horse or the ox; nor is there any apology for its use by man, that does not equally apply to the brute. The last plate represented the appearance of the stomach of the drunkard who dies in a state of mania or delirium tremens. The history of the case from which this drawing was made, and which occurred a few years since, will illustrate the character of the disease and the morbid condition of the stomach. The subject was a man, amiable in disposition, courteous in manners, and high in public life. By degrees he became intemperate, and although he drank, his excessive indulgence was confined to paroxysms of greater or less duration. Several times during the continuance of these paroxysms he was drawn into a state of delirium tremens, but from which he soon recovered. At length one of these paroxysms came on him, which was of longer duration than usual, and of greater severity. For more than a week his mind was entirely deranged, and it required two persons to confine him to his room. He imagined that his nearest friends were his greatest enemies and persecutors, and were constantly laying plans for his destruction. He fancied that he saw spectres and devils, and files of armed soldiers entering his apartment, deadly serpents crawling over his body, and wild beasts ready to devour him. The late great and good Sir Astley Cooper—than whom no one was better qualified to give an opinion on the subject—has declared, "I never suffer ardent spirits in my house, thinking them evil spirits; and if the poor could witness the white livers, the dropsies, the shattered nervous systems, which I have seen, as the consequences of drinking, they would be aware that spirits and poisons are synonymous terms." It is a remarkable fact, and one from which the rulers and lawgivers of our enlightened country would do well to accept a lesson for practical purposes, that each one of the universal empires was remarkable for habits of temperance in its origin and for intemperance at its fall. Assyria—the fate of this mighty empire presents an awful example of the prostrating influence of intemperance. Whilst temperate, the Assyrians had conquered every enemy, and brought under vassalage almost every known country, making Assyria a name for power and magnificence among the surrounding nations; but, as in all other declining empires, intemperance here loosened the reigns of power and prostrated its splendor to the dust. Ninevah was once the pride and glory of the East. Whilst temperate, its inhabitants had been enriched with the spoils of nations which, like a giant, it had trodden under foot; but no sooner had its habits been exchanged for intemperance, than those very nations arose and laid it prostrate, its inhabitants put to the sword, and its voluptuous and effeminate monarch slain in the midst of his profligacy. The lecturer then went on to show that Babylon, the Persian empire, and Rome itself, were undermined, and fell by intemperance. Between the condition of the Roman empire, sometime previous to its fall, and the present state of Britain, there seems to be one striking point of resemblance. The power of the former, while weakened by its vast extension, was also undermined at home by intemperate habits, despoiling its people of their characteristic valor and hardihood. Such is the case with Britain. The immense possessions she has acquired, and the cost of maintaining them, press down her energies like the nightmare. With either hand she grasps a pole, and stretches herself from west to east, to maintain her territorial possessions, while her vitals are festering in corruption, and her moral constitution is being corroded by the ulcers of intemperance. That the British empire is fast approaching its crisis, the signs of the times sufficiently indicate; almost each successive year, for a long period, has been adding to the extent of its dominions, at the same time that it has added to its weakness. The Romans dictated to, and whipt the world, as far as it was known to the ancients, but their dominions fell far short of the extent of the territory which, at the present day, is subject to British rule. The sun never sets upon the empire of Britain, but in every period of revolving time, shines upon one part or other, a fact whereof no other nation can boast. As with the ancient mistress of the world, so with Britain, until she had a conflict with Brother Jonathan on the sea, since which time Britannia does not, nor cannot, rule the waves. (Laughter and applause) The entire population of the British isles numbers about twenty-eight millions, and these have to maintain an empire conquered and wrested from others twice the size of the continent of Europe. An analysis of the moral and social state of these masters of so large a portion of the world would be curious and humiliating, inasmuch as it would expose the littleness of their greatness, and be instructive, since it would show the physical feebleness of Britain. First, then, there are four hundred thousand persons living at large in Great Britain, whose lives are devoted to lawlessness and villainy, the proportion of these characters to the population being one in seventy. There are five hundred thousand drunkards, the proportion being one in fifty. Besides these, one hundred thousand persons are constantly in prison, being one in two hundred and eighty. Forty thousand Britains are inmates of lunatic asylums. Two millions have at one time been either inmates of workhouses or in the receipt of parish relief, but estimating one million as the regular average for the United Kingdom, the proportion is one to twenty-eight. Pauperism, insanity, and crime combined, occasion a necessity for almost four thousand relieving officers, governors, and governesses of insane, pauper, and criminal asylums; five hundred chaplains and physicians, about forty judges, eight thousand lawyers and lawyers' clerks; fifty thousand policemen, and the same number of private watchmen—total 184,540, being one to fifty-one of the population. From this analysis it will appear that of the twenty-eight millions of inhabitants in Great Britain, 2,624,540 persons are either villains, drunkards, prisoners, paupers, lunatics, or persons which these bring into employment; the proportion to the entire population being one in ten, or to the adults one in five. Such is the moral and social condition of the British nation. Such are the people who attempt to sway the most extensive sceptre of dominion which the world has ever known. This state of Britain appears three times worse than its condition at the commencement of the present century, and it is not to be wondered at. Had Prince Albert, Queen Victoria, who is an honor to her sex, and the rest of the nobility of England devoted half of their time and expenses towards improving the social and moral condition of their people which they have spent in getting up the World's Fair in London, it would have redounded much more to their credit. I would ask the getters up of the Chrystal Palace—

> Knowest thou the value of a soul immortal?
> Behold this midnight glory, worlds on worlds
> Amazing pomp redouble this amaze;
> Ten thousand add, and twice ten thousand more,
> Then weigh the whole—one soul outweighs them all.

I have seen the splendor and beauty of a British court assembled at St. James' Palace; then I have seen the British House of Commons where most of the members were beastly drunk—(laughter)—and I have seen the misery and wretchedness of the English people in the manufacturing districts and other parts of the United Kingdom. It is quite common in London for the women to beat their children for refusing to drink gin. How do we stand, ladies and gentlemen? General Washington was always anxious that we should establish and preserve our American character, and that our people might become highly moral as well as intellectual and physical. Are we so? I fear not. Intemperance prevails to an alarming extent mostly throughout our country except Maine. Maine, all honest and true; and I trust our other States will follow her noble example—her name should be written in letters of gold on pictures of silver. Within the last twenty years, sixty thousand persons have died in the city of New York from the effects of intemperance or drinking alcoholic liquors. Here is a startling subject for your reflection. What an annual harvest of havoc is here. The coffins of these sixty thousand, interred side by side, would require a grave seventeen miles long, at the head of which might be erected the vast stone, with emblems of intemperance sculptured upon it, bearing the inscription, "here lie the victims of the drinking customs of the city of New York." Mr. Delevan concluded his lecture by a very eloquent appeal to all to abstain from liquors.

The President then proposed a vote of thanks to the lecturer, which was unanimously responded to. He then, in the name of the Mechanics' Institute, asked Mr. Delevan for a copy of his lecture for publication.

Smithsonian Institution.

PROFESSOR RODGERS' CONCLUDING LECTURE ON THE ATMOSPHERE.

The weather on the last night of Professor Rodgers' lecture was extremely unfavorable. There had been a fall of snow that day, and but three or four hundred persons assembled, among whom were very few females. The objects which had hitherto occupied the attention of his audiences, Dr. Rodgers said, had been the mechanical and chemical properties of the atmosphere, and it became important to understand how the ingredients of the atmosphere are separated from each other. He therefore proceeded to describe the simple process by which the several gases of the atmosphere are separated, and classification is accomplished, which result is produced by the law of affinity—certain substances being used, which combine with the nitrogen, oxygen, and carbon of the atmosphere. Thus, nitrogen may be produced by burning phosphorous or atmospheric air, which abstracts the oxygen, and the residual gas, after agitation with water or a solution of potash, is pure nitrogen. This nitrogen is found to exist in large quantities in all animal substances, but not in plants. Hence the one is termed nitrogenous, and the other non-nitrogenous bodies. The professor then called attention to the fact that all vegetable and animal structures consist of some three or four of the ingredients of the atmosphere, which are to be found in different proportions in albumen, which resembles the white of an egg, fibrin, that constitutes fish, and casseine, one of the component parts of cheese. The simplest form of organization, he said, is found on the surface of snow, described by travellers as being a red substance, which the microscope reveals to be a species of minute fungi, each particle being composed of a single cell, existing individually and alone. It is again discovered where fermentation takes place; the yeast that is thus produced being found to be a kind of fungus, composed of a plant that is constantly developing itself in buds, which form a succession of cells, each attached to the preceding one. He then alluded to the approximation of animate to inanimate matter, between which, in the higher forms of animal life, there is no difficulty in deciding, while in the humblest classes the distinction fails; as, in some instances, vegetables move from place to place, displaying all the functions of animal life, and presently they become fixed to a spot, and form what is incontestably a plant; so that at one time it is apparently an animal, and at another exhibits all the characteristics of vegetable growth. There is an important distinction, he said, between vegetable and animal life. In the one case, vegetables absorb carbon, and are continually throwing off oxygen, by which the air of a room, in which there are flowers, is rendered more pure, when exposed to the action of the sun, and during the day. But while this is true of plants, it is very different with reference to animals; which will be found inhaling oxygen and respiring carbonic acid gas. Thus plants are continually feeding on what animals expel; and animals are being furnished, in return, with that which the plants reject, and which is essential to their existence. This remark as respects plants, he said, does not apply to plants that live on organized bodies—it is not true of fungi, or any of the mushroom tribe; none of these producing the effect that has been described; but which respire carbon and inhale oxygen in the same manner as animals do, deriving their sustenance from decayed wood or the animals which they infest, and have the organized material already furnished. The relations of plants and animals, the Professor said, have another important bearing. While plants decompose the atmosphere, and appropriate its carbon for their growth and support, and throw out oxygen, under the influence of the sun, this is not the action of the plant during the night. The roots then are operating on the atmosphere, absorbing the oxygen, while the leaves expel carbon. Professor Rodgers next adverted to the growth of plants, which he exemplified by beginning with a simple seed, in which food has already been provided in the starchy matter which it contains, and which has been stored up for use, from which source the plant is nourished before it shoots out its rootlets. Meantime, a species of combustion has been going on, and the process of germination has been aided by moisture and warmth. During this germinating process, he said, the warmth has become intense, so much so that the plant is often destroyed, but, as yet, nothing has come from the air. Presently, however, the roots ramify, and leaves spread out from the stem, which rises by an instinctive movement; and then comes the double action of the leaves deriving nourishment from the atmosphere, and the roots pumping it up from below. And now the action of the root becomes most important. So long as the plant was independent of extraneous succor, they did not exert to absorb from the surrounding earth; but when they are called into activity, they operate by means of a sac at the termination of each rootlet, through which nutriment, in a very subtile form, is received into the plant, according to the law of what is termed entomosis, as is the case where the carbonic acid gas penetrates the lungs, displaces the oxygen, and is then expelled from the system. There is a great resemblance, also, between this termination of the roots of plants and that of the arteries in the human system, at which are placed the capillary vessels, in which the support of the solid, and the formation of the fluid parts of the system especially, take place. The Professor here went into the consideration of capillary attraction, which is known to possess a force of enormous energy, and which, in one of the districts of France, is used for the purpose of separating mill stones of large size, by a process which he described. This power, he said, had its limit; but this difficulty is avoided in the growth of trees, it being renewed at certain stages, owing to the evaporation that takes place; and he mentioned an instance where capillary action reached the top of a tree ninety-five feet in height, after the roots had been severed, being aided in its ascent by the action of the leaves. Had the tree been deprived of these, the capillary attraction would have ceased. As a proof of the importance of the atmosphere, as an auxiliary of plants, the Professor mentioned that, at one time, seventy million gallons of palm oil were imported annually into England. The tree which produced them was known to grow in a soil which was purely silicious, and their nutriment must have been derived entirely from the atmosphere. The soil of the Mississippi, he said, must have had a beginning, the substratum being every where sand and white silicious clay. This soil must have been formed by the deposit and decay of numerous plants, which were indebted to the atmosphere for their growth. But this is not all—if we examine any of the great coal fields, we perceive a series of seams of black bituminous and anthracite coal, spreading over a large extent of country, which is neither more nor less than carbon and oxygen, that have been derived from the atmosphere, and proving that these masses are decayed vegetables, that have undergone a chemical change, produced by combustion. Hence, when this product of nature's laboratory is consumed by man, for purposes of social comfort, or in compliance with the requirements of science, he is literally returning to the atmosphere that which is its own.—Having established the principle that plants are indebted to the atmosphere for nourishment, the next inference that he drew was, that man derives his existence, directly and indirectly, from the same source—indirectly, to be sure, but the no less certain and well defined—and deriving his food from plants that feed on air, or from animals that feed on plants, and adapting such portion to his sustenance as his structure may require. The expelling of carbonic acid gas, which is the result of external combustion, constitutes the distinction between animals and plants. Decay is slow insensible combustion; and in animal life there is a constant burning up and a consumption of the animal structure, and this is regulated by the exercise which a man takes, whether mentally or physically, and an individual is consuming himself more or less rapidly, in proportion to the steam which he gets up. There is therefore, he said, a continual change going on, and every day we become a different body, so that a man may be said to lose his personal identity, and it may be said of him, as it was of the stocking, which had been darned so frequently that no portion of the original fabric remained. Lay a block of marble on the snow, and it will, in a short time, assume the temperature; place a man there, and he will, for a long time, retain his usual temperature. Plants, while growing, have the power of generating heat; this is produced by breathing, and what comes from the lungs, as was before stated, is the result of combustion, owing to the combination of oxygen and carbon, and oxygen and hydrogen, by which evaporation is produced, as was exhibited during the experiment, by which hydrogen, when burst in oxygen, produced vapor. As a proof that combustion is going on in plants, as well as animals, Dr. R. said, if the ball of a thermometer was plunged in a flower, the mercury would be found to rise several degrees. The last consideration on which he said he should dwell, would be the economy of this combustion. It is found that a healthy man will burn ten ounces of carbon in twenty-four hours, that is, he will exhale as much carbonic acid gas as it would require ten ounces of carbon to produce. Now, as he can ascend Mount Blanc in two days, resting during the intervening night, he will consume ten ounces of carbon in the ascent. This will be the expenditure of gas in elevating a man from the base to the summit. A steam engine, he said, would be obliged to burn fifty ounces to accomplish the same object. It would thus be found that the living machine has five times the efficiency and economy that we find in the most perfect of human contrivances—the steam engine. A horse is able to lift twenty-four millions of pounds one foot—that is the measure of the work he will perform day after day, being fed with twelve pounds of hay and corn; but if we reduce the quantity he would not do as much work. Now, were this power converted into steam it would not produce one-fifth as much effect. We have, therefore, in the animal the most perfect machine. Yet it is impossible to detect its commencement. How is it the first point of life comes into being. There is mechanism here which study never can disclose; there are nebulæ for the microscope to discover, but these would only lead to other revelations, which would call for fresh explorations. But the professor said he had only been considering the simple relations of animated creation; the sublimest of all contemplations is to be found in the intellectual and moral powers, which elevate man in the scale of being. In the contemplation of these, however, we must seek for aid from that inspiration which is vouchsafed by the great Author of All, speaking to the hearts and consciences of men.

The Fine Arts.

Mr. Carpenter, whose very charming pictures have excited the admiration of the best judges in the city, has just completed a portrait of ex-Mayor Talmadge, of Brooklyn. The picture, which is an excellent likeness, and handled with his usual felicity, is painted at the order of the Common Council of that city. A commission for a full length portrait of David Leavitt, Esq., has been given to this artist, who will, doubtless, in this as yet untried field, more than sustain his well deserved reputation.

Mr. Kensett is as industrious and as graceful as ever in his rendering of the mountainous scenery of New England. A picture, nearly completed, made up of scenery in the vicinity of the White mountains, is among his most happy efforts. We wonder that amateurs do not endeavor to possess some of the many beautiful sketches which adorn the walls of his studio.

We called at the studio of Mr. Leutz, but found him so busy with his friends that he had no time for a word on the subjects his pencil is engaged on. His great picture of Washington crossing the Delaware, doubtless allows him a little respite from his arduous labors. The only new work he has on hand is a scene taken from the revolutionary history of the United States. The subject is Mrs Schuyler setting fire to a field of wheat, and will, doubtless, when finished, be worthy the reputation of this famous artist.

The "Last Hours of General Washington," by Mr. Stearns, is near completion. It has the reputation of surpassing all his previous efforts in this line of art. On a future occasion we shall notice this picture critically, and the more readily, too, on account of its being a subject within the compass of the artist's ability.

A preliminary meeting of artists has been held, at which the necessity of applying to the Legislature for an amendment to the charter of the American Art Union, by which artists may participate in the management, was discussed. A memorial will be ready, in a few days, for the signature of artists and all who take an interest in the cause of art. It is stated, on very good authority, that the salary of Andrew Warner, as Secretary of the American Art Union, is twenty-five hundred dollars. An under secretary, it is said, performs most of the labors pertaining to that office.

Mr. Oddie has one of his recently painted mountain scenes in the store of Messrs. Williams and Stevens. We wondered, in looking over it, at finding a well designed gothic cottage in a region where a log hut would even be out of place. This effort at embellishment does not meet our approbation, and we think that the artist would do well to be more consistent in regard to the varieties of his otherwise novel and very pleasing compositions.

Mr Rossiter.—This gentleman is hastening to a close with his great picture of the Babylonish captivity. It is one of those lofty subjects which are well calculated to excite the devout pencil of this "luminous and voluminous" artist, and the picture in question is replete with the peculiar characteristics of his mind and pencil. A fine full length portrait of a lady, by the same hand, is near completion. It bears a strong resemblance to the style of the most eminent painter of the Florentine school. Several lesser works occasionally employ his pencil, one of which is a charming little study for an amateur.

Portrait of Bishop Dane—a small whole length, in oil, and in feature not dissimilar to the Right Rev prelate, though we think there is a "rubicundity of the visage," not exactly corresponding with the required self denial of a church dignitary. Yet alas! as Bishops are but men, and their sphere of duty more wide than a Curate's, it may be admitted, in all candor, that their infirmities may be greater, without exciting any extraordinary portion of amazement. The picture in question is by the artist termed "a sketch," some friends of the Bishop having resolved to procure his likeness, for the purpose of sending it to a distinguished English prelate.

An eminent American artist in London, writing to his friend here, deprecates the influence of the American Art Union on art. He does not oppose Art Unions which allow the drawers of prizes to select both the subject and the artist to paint it. Under the plan of the American Art Union, which must buy pictures, the best artists of the city, he says, have become sinecurists—"The works of these gentlemen are not such as they would have painted had they relied on private encouragement. For the most part they are characterized by gaudiness and pretension, alike repugnant to the true principles of art.

T. A. Richards, whose pen and pencil are equally graceful when employed in the cause of art, is closely applying himself to his profession in the mountain regions of Georgia. He will, however, soon return to his ample studio in the New York University, laden with the spoils of his energetic and felicitous pencil.

Mr. Edward Mooney is at Columbus, busily engaged in painting the portraits of the gallant Southerners. Mr. Mooney never misses his mark when he determines to bring down his game.

Mr. Shegogue has a commission for a fine picture, which is not yet sufficiently advanced to justify criticism. It is, of course, portraits of children, a branch of the fine arts in which this gentleman has attained a well deserved reputation. A portrait of Miss Howard, of Albany, and a very clever and beautiful portrait of Miss Lawrence, of this city, are now completed in this gentleman's studio.

Mr. Osgood has gone to California. We ought to have said returned thither. Since the great bereavement this most amiable and deserving artist endured in the loss of wife and children, the scenes of the Pacific seem to have a peculiar charm for him. In the painting of ladies' portraits, this artist exhibited a great fondness for the style of Sully, the most charming painter of ladies' portraits among all our great artists. In historical painting, Mr. Osgood exhibited a predilection for a higher rank in his profession than his talent warranted him.

Mr. Lazarus.—Several very clean cabinet pictures from the pencil of this artist, came under our notice a few days since. In his studio we saw an excellent portrait of Mrs De Silver, and a charming little picture, in process of finishing, after the manner and style of Diaz. We knew of no artist in the line of this gentleman's labors, who more successfully renders his subject, both in drawing and color.

Mr. Charles Ingham, we are sorry to say, has been severely indisposed for several weeks past. He is recovering slowly. We notice among many unfinished portraits, a very beautiful head of Master Pratt, of Boston, and a fine portrait of Mr. Pomeroy, of Stockbridge. Mr. Ingham, whose pencillings have earned for him the reputation of the most accomplished artist of his age, has just completed a series of portraits of ladies.

Mr. Frazee, the sculptor and architect, lies very low. His situation is not unattended with the privations peculiar to men of genius. A claim on the general government, not yet audited, aggravates his disease, as he has a large family depending on him for their support.

Mr. Cropsey has completed his magnificent pictures of "The Spirit of War and of Peace." These pictures are regarded by his brother artists as his greatest works. We have watched their progress with great interest—not less on account of the grandeur of the subject and mode of treatment, than on that of great solicitude for the success of this most accomplished professor of art. Mr. Cropsey stands alone, almost, in architectural painting, and in these pictures has most sternly rebuked those who neglect to cultivate so important a branch of art. We learn from the artist that these exquisite pictures may be had at a price very far below the estimate we put on them. It is enough, however, we should suppose, that the pictures be seen only, to insure their removal to one of the stately private mansions in the upper part of the city.

Perfectionism and Polygamy.

[From the New York Observer, Jan. 22]

Recent revelations of the interior and total depravity of some professedly religious establishments, have shocked the public mind, and led to inquiry as to the tendency of religious delusions. It is hard to say whether knavery or folly, whether fanaticism or lust, has more power over the Mormons of Utah and the perfectionists of Oneida; but the facts that are now before the world in reference to both these communities, are worthy of being studied as new chapters in the history of modern imposture and delusion.

It is hardly known, but it is true, that there is a weekly newspaper published in this immediate neighborhood, to advocate and propagate the doctrines of the Oneida Perfectionists—that in the community of those who are led to embrace the system, all the laws, both human and divine, that are designed to regulate the married relation, are set aside and denounced, while the unrestrained indulgence of the human passions is practised, not merely as the means to present enjoyment, but as means of grace or helps to holiness. The founder of this disgusting order of united adulterers is a graduate of a New England college, a student in two theological seminaries, and now the editor of the paper we have referred to above. The centre of this sect is in the town of Lenox, Madison co., N. Y., where about 150 men, women and children, live together in one house, with no distinction of property, family, or authority. Each one does what seems good in his own eyes. The bible is their nominal constitution and how curiously they follow its teachings, is evident from the fact, that they disavow all separate or individual right in "property, wives or children." Literally, they have "all these things common." But the sect is by no means confined to Oneida and Madison counties. In New York and Brooklyn, and in Newark, N. J., and in many other places, there are groups of practical members of this foul body, who, under the name and guise of seekers after spiritual enjoyment, and professing to be perfectly holy, are living in a state of vile concubinage, and even worse, such as is not even thought of among the Mormons. In Utah, the distinction of husband and wife is rigidly maintained, and non intervention insisted upon even at the peril of life. But in the Oneida Association, and in the boarding-houses established on similar principles in this vicinity, these distinctions are utterly abolished, and the freest licentiousness practised as the highest developements of holiness. We have been furnished with a large number of certificates signed by females of this community, stating that at first they were fearful they were not doing right, but the longer they have practised on the system here pursued, the holier they are sure they grow. On the principle, we suppose, that where there is no law there is no transgression, they have abrogated all authority but inclination, and they never sin because they never do anything but what they like. The reader may be amused at the practical operation of the association at Lenox, as we find it detailed in one of their reports.

The children are trained in a general nursery, and "it is found to be altogether a more comfortable task to take care of six in the new way, than it had been to wait on one in ordinary circumstances." "The only drawback on the operation was the temporary distress of their mothers in giving up their little ones to the care of others, which made occasion for some melodramatic scenes; but the wounds were soon healed, and the mothers learned to value their own freedom and opportunity of education, and the improved condition of their children, more than the luxury of a sickly maternal tenderness." This is the language of the report.

The way they sleep is curious. One large room is set apart for a dormitory, and each bed is encompassed by a sort of square tent; so that one stove warms the whole space; and, "as the principles and habits of the association are more gregarious than usual, the sacrifice of privacy is a small affair."

The women found that much time was spent in dressing their hair, as they looked into Paul's theory of long hair, and, says this report, "the discovery was made that Paul's language expressly points out the object for which women should wear long hair, and that object is not ornament but a covering. In this light it was immediately manifest that the long hair of women, as it is usually worn, coiled and combed upward to the top of the head, instead of answering to Paul's object of covering, actually exposes the back part of the head more than the short hair of men." This mode of reasoning was carried on till the "bolder women" cut off their hair and wore it on their necks, as girls do, and soon the practice became general. In the next place, the women laid aside the usual dress, and substituted a short frock and pantaloons, which was found to be altogether more convenient. The report says:—"The women say they are far more free and comfortable in this dress than in long gowns; the men think it improves their looks, and some insist that it is entirely more modest than the common dress." This is plainly the germ of Bloomerism.

The religious exercises of this association consist of public meetings, when each one is called on to relate his own experience, or to make such exhortations or reflections as "are on the mind waiting for vent." Different evenings are set apart for different purposes; one for music, one for dancing, one for Bible reading, etc. The religious influence is said to be wonderful on those who have joined the association. All who come in while in an unconverted state are declared to have been converted, and one man who was a confirmed lunatic has been entirely cured. The annual report sets forth a theory of promiscuous intercourse of the sexes, as compatible with the highest state of holiness on earth, so loathsome in its details, so shocking to all the sensibilities even of the coarsest of decent people, that we cannot defile the columns of our paper with their recital. It must be sufficient to say, that the doctrine is taught, and the attempt is made, to defend it from Scripture, that unbridled licentiousness is the law of Heaven, the perfection of human happiness, and the realization of the highest style of divine virtue. There is no shrinking from the boldest and frankest avowal of this faith and practice. On this point these Oneida associationists are honorably contrasted with the Fourierites of this city, who refuse to be held responsible for the consequences to which their doctrines inevitably lead. The report holds such language as this:—"Variety is, in the nature of things, as beautiful and useful in love as in eating and drinking." Again, it is held that it is all very well, and oftentimes of great advantage to bring about "special pairing"—that is, marriage of convenience; but, says the report, this should be no barrier to the enjoyment of others. "The fact that a man loves peaches best, is no reason why he should not, on suitable occasions, eat apples and cherries." We are able to give only the vaguest and most distant intimations of what is set forth in these pages, and we are now fearful that we are trespassing on decency in these quotations. The perversion of Scripture is oftentimes so blasphemous as to chill the blood, while a scheme of social wickedness under the name of virtue—nay, of religion—is here taught, that the foulest days and darkest places of Roman Catholic iniquity never conceived. The beasts of the field are better in their habits than these people profess to be. If the orgies of the heathen were re-enacted in the city of New York, in public, they could not fill the mind with more horror than every virtuous person must feel when contemplating the "interior life" of this Oneida Association.

When we now bear in mind that the persons thus living in this beastly manner, were but recently members of orthodox, evangelical churches—some of them well educated, and most of them respectably connected—we cannot fail to regard their history as in a high degree instructive, tending to show the danger of error, and the infinite necessity of holding fast to the truth. Loose teaching from the pulpit and the press is destructive to the principles. The only safety is in steadfast adherence to the good old-fashioned morality of our fathers and mothers, on whose principles the first half of the nineteenth century has made no improvement.

Naval Intelligence.

Orders have been received at the Charlestown Navy Yard to fit out the U. S. propeller Princeton immediately, and send her to Baltimore to take in her machinery. The Cumberland will be prepared to receive her officers in about ten days.

Marine Affairs.

LAUNCH.—A fine ship of about 1,000 tons, called the Huldah Kimball, was launched at Marblehead, on the 5th inst., at 11 o'clock. She is intended for a freighter, and is fully rigged on the stocks. The keel of another ship will be laid in the same yard, that of Edmund Kimball, Esq., to whose enterprise and perseverance Marblehead is indebted for the permanent establishment of ship building. We learn that several schooners, designed for the fishing business, are now on the stocks in that town, in various stages of construction.

MOVEMENTS OF GARIBALDI.—The *Revista*, of Lima, of December 2, says:—"We have been informed of an event which took place at a small distance from our office, an account of which we give as it has been transmitted to us. It appears that, a few nights before, General Garibaldi and Charles Ledos, a French merchant, established for several years in that city, were present at a celebration of a marriage. In a group where the Italian General was, the conversation turned upon the incidents of Italy, and of the various encounters which took place between the troops of that country and those of France, and some serious words were exchanged between Garibaldi and Charles Ledos, who took a part in the conversation. Since then, the question had been discussed by anonymous communications in the newspapers, till to-day, at three o'clock in the afternoon, when it is said that General Garibaldi had been wounded in the head in the store of Sr. Ledos. We do not know absolutely the particulars of that event; we only hear that the affair has taken a most grave character. After having written the above, it is reported that Sr. Ledos was also wounded in the head."