Miscellaneous.

American Steel.

This is the most useful metal in the world. We could do without gold or silver, but not without iron or steel. We have lately seen notices of two inventions for the manufacture of steel direct from the pig iron, one in Connecticut and the other in Newark, N. J. For a long time we had to import all our steel from England, and England had to import all her iron from Sweden to make her steel. Within the past year steel has been made at the establishment of the Adirondac Steel Works in Jersey City, and although these works are comparatively in their infancy, having been in operation only since last January, the article producedis preferred, at the same price, for many purposes, to the best English cast steel.

The ore used is produced from Essex county, in this State. at the sources of the Hudson, at an altitnde of 5,000 feet, among the Adirondac Mountains, and about 50 miles West from Lake Champlain. Large expenditures have been made by the proprietors, Archibald McIntyre, of Albany, Archibald Robertson, of Philadelphia, and the late David Henderson, of Jersey City, for the purpose of developing the immense mineral resources of that region.

The ore is here converted into bar iron and transported to the Company's works in Jersey City to be manufactured into steel. Its adaptedness to this purpose was ascertained by Joseph Dixon, Esq..of Jersey City, after a protracted series of experiments made with refeerence to that object. He also succeeded in the use of anthracite—supposed by experienced English manufactures impossible—and then applied himself to the manufacture of blacklead crucibles possessing sufficiently powerful refractory qualities to withstand the heat of anthracite furnaces. In this too he was successful, and his pots are now in use in England and elsewhere, by the first artisans.

In these, the steel is broken into small pieces, and put into sixteen crucibles of a capacity of forty to sixty pounds, which are placed in as many small furnaces whose tops are even with the surface of the floor. After the lapse of two hours, their molten contents are poured into ingot-moulds, of various sizes. The steel is then readily drawnout upon being re-heated, under heavy hammers, into bars of any desired shape or size.

A Deep Artesian Well.

The artesian well at Grenelle, in France, attained a depth of 602 yards before a sufficient supply of water could be attained. Some idea of the difficulties encountered by the projectors may be had from the fact that in May, 1837, when the boring hadextended to a depth of 418 yards, the hollow tube, with nearly ninety yards of boring rods attached to it, broke and fell to the bottom of the hole, and it was necessary to extract the broken parts before any further progress could be made—a work of fifteen months' duration. Similiar occurrences frequently impeded the labors of the workmen, until at length, in February, 1841, the rods suddenly descended several yards, and in the course of a few hours the water rose to the surface and discharged itself. at the rate of 600,000 gallons per hour. At the extreme depth of 602 yards the mercury in the thermometer rose to the height of 81 degrees, and it is supposed that if the boring had been continued to the depth of 1000 yards, the temperature of the water would then have been 104 degrees, and immediately applicable to bathing establishments and other places where warm water is required.

Effects of Chloroform.

The London Medical Times states that a very melancholy accident recently occurred in Glasgow, Scotland. Dr. Adams, Resident Physician to the Clyde street Hospital, having occasion to use Chloroform, inhaled it himself to try its strength, but without any serious consequences ; repeating, however, this experiment, and incautiously increasing the dose, the effect was fatal; he fell back and immediately expired."

On the 23d August, Mdme. Labrune, a healthy married woman residing at Lagres, in France, died from the effects of Chloroform vapor. She wished to have a tooth extracted, and prior to the operation inhaled the vapor, which was given to her at her own desire. Complete insensibility was not produced at the first trial; more Chloroform was placed on the handkerchief, and she drew a full inspiration. Her countenance immediately became pallid; her features were visibly altered ; there was dilation of the pupils, with a convulsive rolling of the eyes, and no pulse could be felt. Every attempt was made to restore life, but without success. She died as if struck by lightning.

The London Medical Journal adds that the use of Chloroform, simply to allay pain, is not warranted by the cautious practitioners of Great Britain and Europe, but has been abandoned by them as dangerous, and liable to be fatal.

Fall of Manna.

About four months ago extracts, from foreign papers, gave an account of a fall of Manna near to Mount Ararat in Asia, to supply, miraculously, food to the starving inhabitants, who were suffering from famine. The reports of this alleged miracle were much distorted and by late letters in the Gardener's (English) Chronicle, from the spot, the Manna, at least, turns out to be very different from that by which the Israelites were fed. The following are the facts relating to the case :—

About the 18th or 20th of April last, at a period when there had been, for a whole fortnight, very rainy weather, with strong winds from the S. E., the attention of the shepherds and villagers frequenting the country near Byazid was attracted by the sudden appearance in several localities, of a species of lichen scattered in considerable quantities over certain tracts, measuring from five to ten miles each in circumference. One spot is situated three miles east of Byazid, behind a range of rocky mountains, stretching from the north gradually towards the south east. The other is five miles to the south of Byazid near a similar range of rocks, running in the above named direction. It is remarkable that no one had ever before observed the lichens in the neighborhood, not even the shepherds, who often pasture their flocks on the crags and in almost inaccessible places.

What seems to confirm the assertion that these products were not known previous to their unaccountable appearance is, that last year the crops were greatly injured by locusts, and a famine threatened; had the substance been known to exist anywhere in the vicinity, it would most assuredly have been eagerly sought after and collected last autumn, when the price of wheat had risen to more than double its usual value. A similiar phenomena is said to have occurred at Byazid some years ago, when it is probably that the edible qualities of these lichens became known to the natives ; unless showers took place previous to that period. Supposing the lichens to have been blown off some adjoining inaccessible places, and in such great quanties, too, how is the rarity of the occurrence accounted for and how is it that they covered such large tracts of country ? No proof has been adduced of any one having seen the fungi fall ; but as the first intelligence was brought by villagers, who early one morning, had observed the lichens strewed over a tract of ground where they had not observed any on the evening before, it is probable that the showers must have taken place during the night. In some localities the one or the other kind of lichen alone was found ; in others, the two species mixed. On the 19th of June, another quantity of lichen was discovered, and as the spot was a well-frequented one, it seems likely that the fall had occurred only a few days previously. From all accounts, the quantities collected have been very great. Dr. Heinig, a physician at Byazid, says that a person could collect at the rate of 1½ lbs. in an hour, which, considering the lightness of the product, is a tolerable quantity. The substance is ground up with wheat and made into bread, or eaten simply in its raw natural state.

The Past and Present.--Inventions.

At the last anniversary of the Harvard University, Dr. Bethune of this city delivered the oration, (since published) which we consider to be one of the noblest efforts of eloquence on record. The following extract will show something of its powers.

"Far be it from us to speak disrespectfully of the few minds which shone in the twilight of Europe, becoming larger through the fog yet heralding the dawn. No true-hearted student is without a strong antiquarian sense of the interest attached to the beginning of art, letters and civilization ; neither can one who has visited the minsters and cathedrals of Britain by day, or Melrose and Glastonbury by moonlight, ever forget his admiration of the creative genius which combined more than Cyclopean strength with more than Corinthian luxuriance, but we must protest against this sacrificing of convenience for an imitation of the antique, this making venerable of all that is old, this condemnation of the useful as the unspiritual.

To an elevated, healthy imagination, there is more poetry in a nicely constructed steam-engine, working with its Titan sinews and Briarian hands, yet breathing softly as a sleeping child, than in all the knightly tournaments and sacerdotal shows that our ancestors ever wondered at ; all the troubadours of Provence had not a tithe of the romance that a clear, æsthetical eye can see hanging round a village of factory girls, every one of whom is a living story of love, hope, constancy, and courage ; a modern linen weaver's label often presents as fine specimens of Arabesque as can be found in a virtuoso's cabinet; nay, if richness of design, grace of drawing, and harmonious contrasts of color be criteria of good taste, we may point to a Sunday group of servant maids in the fresh pride of their Lowell printed Calicoes, and say, "Solomon in all his glory was not arrayed like one of these !"

Model Lodging Houses.

The London correspondent of the Chronotype writes as follows of the Model Lodging Houses in that city : "The result of the Poor Man's Clubs has been very gratifying during this time of sickness. I have many friends who are among the founders and active supporters of these establishments, and they all assure me, that the health of inmates, for the sickly months, has been most satisfactory. The deaths among children are very considerably lower than in the surrounding neighborhoods, and the cholera has not caused a single death in the largest of Lodging Houses, containing 300 sets of bedrooms and 1600 persons. I say the largest, because I am precisely informed ; but I believe I should be correct in saying, that no deaths have occurred from this cause in any of these buildings, although raging in the vicinity of several of them.—What hopes for the rich in such a condition of the poor, especially if it becomes general, and rose by successive improvements to fresh immunities and perfections. The Model Lodging Houses are extending in various parts of London, and the trades are associating to carry out their views in this direction. Within the week the journeymen bakers have held a meeting for the purpose. The people who enter these houses are net of the very lowest class, they are chiefiy the superior portion of the working classes—families that can appreciate to some degree the benefits of cleanliness and comforts.

Nankin Cotton.

The Augusta (Ga) Chronicle says that we were in error in respect to the quantity of Nankin Cotton grown in that State, and says .—

"It is not so prolific as the different varieties of white, and, as the price for the last few years has seldom ruled above ten cents, its culture has been almost entirely abandoned. It has been manufactured into an imitation of of the Indian nankeens almost entirely on account of Augusta merchants, of whom Thomas G. Casey, now of New York, was the pioneer. More recently it has been extensively manufactured for A. Sibly and T. S. Metcalf, and a large lot is now in progress for Messrs. Adams and Fargo of this city. Of this latter lot we have recently seen some specimens which are equal if not superior to any we have ever seen."

California News.--Gold, Gold!

By the late news from California, we have the most astounding accounts of gold discoveries that have reached us yet. It is nothing less than a vein of gold in the solid rock—a bona fide mine, the first which has been found in California. Mr. Bayard Taylor writing to the Tribune says :—

"I saw some specimens which were in Col. Fremont's possession. The stone is a redish quartz, filled with rich veins of gold, and far surpasssing the specimens broughtfrom North-Carolina and Georgia. Some stones picked up on the top of the quartz strata, without particular selection, yielded 2 oz. of gold to every 35 lbs. Col. Fremont informed me that the vein had been traced for more than a mile. The thickness on the surface is 2 feet, gradually widening as it descends and showing large particles of gold. The dip downward is only about 20°, so that the mine can be worked with little expense. These are the particulars first given me, when the discovery was announced. Still more astonishing facts have just come to light.

A geologist sent out to examine the place, arrived here last night. He reports having traced the vein a distance of two leagues, with an average breadth of 150 feet. At one extremity of the mine he found large quantities of native silver, which he calculates will fully pay the expense of setting up of machinery and working. The ranche upon which it is situated was purchased by Col. Fremont in 1846 from Alvarado, former Governor of the Territory.

An Ink Bottle Burst its Biler.

A singular accident, says the Boston Atlas, occurred in the office of the Register of Deeds, on Wednesday forenoon, namely, the explosion of an inkstand. It was one of the old fashioned black "Wedgewood" stands, holding nearly a pint of ink, and was probably about half-filled. The occupant of the desk upon which this stood, being in another part of the building, was astounded by a report from his room, like that of a pistol. On going thither he perceived neither fire or smoke, but a tremendous rivulet of the fluid, which creates so much good and evil, pouring over the desk, and doing immense mischief to some late records, in the interior, which will have to be re-written. Upon examining the stand, a vertical fissure was found, extending from top to bottom, being about four inches.

Necessity of Coolness in Engineers.

Mr. Seeley, engineer on the New Haven Railroad, lost his life by jumping from the engine to hastily. It appears the train was approaching (on a decending grade) a draw-bridge, and the signal indicated that the draw was up so that the train would run into the river, and he sprang from the locomotive, among the rocks, breaking his scull and nearly every bone in his body. The breakman remained on board, doing what he could to stop the impetus of the train, which passed safely over the bridge. The signal had been wrongly placed.

Post Office Abuses.

The Philadelphia Spirit of Times, boldly declares that private letters are opened in the Post Office, their contents known, sealed up and delivered to the owner. This is a shameful fraud, if true, and should be inquired into. Sealing a letter with a wafer, and pricking holes in it, will prevent its being opened.

If this is seemingly true there ought to be a searching investigation.

No American Copyright in England.

By a recent decision in the English Court of Exchequer, it appears that no foreigner can enjoy a copyright for his works in Great Britain, except through a mutual international arrangement between the two countries. This is fair play.

Twelve machinists and engineers belonging to the works of T. F. Secor & Co,, have been discharged because they would not work on the Ohio during all last Sunday, after working all night, without getting any refreshment.—They have published a card in the Tribune.

The number of gas works in England, Wales, Scotland and Ireland is 775, representing a capital of £10,500,000, and yielding an average profit of five per cent.