THE ARTS AND SCIENCES.

A NEW HORSE SHOE.—A gentleman of Philadelphia has just completed a valuable improvement in horse shoes, which, it is said, enables horses to travel over paved street without injury and as easily as on farm or common roads. A thin plate of steel or iron is constructed to fit the hoof, and then the ordinary shoe. Between this plate and the shoe a strip of gum elastic or other equivalent substance is placed, and the three secured, riveted together. The skill of the fastening of the plate to the hoof, and to give the gutta percha elasticity, without loosening the nails in the hoof, pieces are taken from the side of the lower shoe, which permits the heads of the nails to pushes in the plate and thereby hold it securely to the hoof, while the shoe and gum are held to the plate by the steel pin before nailing it to the hoof. The plates, when made, will last for years, as they never touch the ground, and those using them upon their horses can, by having duplicate plates, always have shoes ready for their horses, which can be put on in a few minutes. The advantages of the shoes are, that the gum between the plates will absorb all the vibration caused by the shoe striking the stones, hence there will be no jar to the horses' legs—thereby preventing all injury.

A CAST-IRON BELL.—A cast-iron bell, weighing 5,025 pounds, has been cast in Cincinnati, and it is said that its vibration is more perfect and continuous—and its sound as full and melodious—than any bell cast from the ordinary bell metal. The Cincinnati *Enquirer*, in speaking of the bell, says: "The economy of these bells over those cast from other amalgams must be apparent to every one, reducing the price at least two-thirds. For example, a bell 16 inches in diameter, 20 inches high, and weighing 65 pounds, of iron amalgam, can be sold for $6; and one of 43 inches diameter, 24 inches in height, and weighing 550 pounds, can be sold for $75. The same sized bells of brass composition would cost, relatively, $18 and $225. For church, school, or farm purposes, or for locomotives, steamers, and ships, we see no reason why they should not supersede all others in use."

MAGNIFICENT TELESCOPE.—A new magnificent equatorial telescope has recently been mounted at the Royal Observatory, Greenwich, under the direction of the Astronomer Royal, Professor Airy. It surpasses in adaptitude any other instrument of the kind in England or France, and is nearly on a par with the celebrated instrument at Pulkowa, the principal Observatory in Russia. The size of the object glass is nearly thirteen inches, and the length of the telescope fifteen feet. It is so nicely balanced on its axis as to be movable vertically with the slightest touch. The movement in longitude is effected by clock-work; and the apparatus set in motion, although weighing several tons, is moved by the clock with the greatest evenness and regularity of motion, by a simple touch. Its advantages can be applied or removed in an instant by the observer.

SEWING MACHINES—Elias Howe, Jr., whose patent on the sewing machine was granted Sep tember 10, 1846, applied, on the 6th of June, for an extension of such patent for a further term of seven years. The testimony in the case will be closed on the 24 of August, and the day of hearing is set for the 13th of August next.

If reports are correct, the inventor has become independently rich from this invention, and is daily in receipt of a princely income from it. The industrial interests of the country demand that there shall be no hesitation in the mind of the Commissioner of Patents to renew and extend this patent. Therefore, those whose interests are opposed to such renewal should at once take measures to prevent it.

THE NEW COMET.—Professor Bond, of the Cambridge Observatory, announces that the expected comet is approaching the earth, though owing to the strong moonlight, its low position, and its increasing distance from the sun, it is doubtful whether it will become very conspicuous to the naked eye. Through the large telescope it presents an appearance curiously like that of the great comet of 1858 on a reduced scale. The tail branches off in two streams from the nucleus.

A MACHINE FOR SKINNING EELS.—A machine for this purpose has been invented and patented by Adam Emeigh, of Jerusalem, Long Island. The *Scientific American* says that it has been practically tested, and is found to perform the work in a manner much more expeditious and preferable than when done in the ordinary way; the flesh not being bruised and discolored, as usually is the case.

MONUMENT TO GEORGE STEPHENSON.—The monument to the great English engineer, George Stephenson, designed by Lough, is progressing. His principal figure of the great work is raised on a pedestal, at the base of which are four figures representing an engineer, a blacksmith, and a navvy. The work is to be in bronze.

FREE ART GALLERY.—Mr. Fairbairn's gigantic plan of a Free Art Gallery and Museum for Manchester is in a fair way to be realized. Fifteen gentlemen have subscribed £1,000 each, twenty others £500 each, and fifty more £25 to £250 each. Truly there are "merchant princes" in Manchester.

The Savannah *Republican* notices the increased use of fertilizers in the State of Georgia this year, and says "it is becoming apparent that it is cheaper and easier to renew old lands than to emigrate to new and unsettled countries."

A MACHINE for working button-holes is said to be the latest thing in the way of inventions. It will work, it is reported, ten button-holes in a minute.

MUSICAL AND DRAMATIC.

RUBINSTEIN, the pianist, is going to finish his opera in Venice.

MME. COLSON and Stigelli were announced to appear last week at Richmond, Virginia.

SAM COWELL has quitted New York on a visit to Canada.

EDWIN BOOTH sent home $14,000, the profits of his starring tour during the season now closing. He is to be married to Mary Devlin in July.

THE Conways and Miss Crocker are no longer at the New Bowery, being with Mr. Barrett in Montreal.

It is said, and we hope with truth this time, that Mr Forrest will shortly reappear on the New York stage.

F. BARRETT has commenced a series of papers in the *Boston Commercial Gazette* on the great French *tragedienne* Adolphe Rachel.

THE Mobile Amphitheatre is to be altered and redecorated in grand style. In its new form, it will seat double the number of persons. Mr. Duffield will be lessee and manager.

THIRTEEN years since, when Schumann's cantata, "Paradise and the Peri," was performed at Berlin, it almost made a *fiasco*. It is now meeting with great success.

A MME RIVAT has lately written an opera, which will shortly be produced in Paris, at the Theatre Lyrique. It opens with "Le Mariage aux Epées," is tolerably warlike.

THE Boston Theatre is advertised to let for one or more years, from the 1st of September next. As it is not advertised for the Academy of Music, it may be presumed that this title is unpopular with a majority of the stockholders.

M'LLE TERESA PARODI, having given up the Opera Troupe, has organized a Concert company in Providence. The company consists of M'lle K. Montmorency, Mr. W. H. Dennet, and Mr. Edward Hoffman, the pianist.

BUCKLAND is doing very well in Montreal. The legitimate appears to have been having a good string, Macbeth, Hamlet, The Rivals, &c., having been played with much success. Fisher's Macduff is praised very highly.

THE annual dinner of the English Dramatic Authors' Society took place on June 30th, at Greenwich, near London, Mr Benjamin Webster in the chair. There was a numerous attendance of members.

THE valuable theatrical wardrobe, music, and manuscript plays, belonging to the estate of the late Wm. E. Burton, will be sold at auction, in New York, on or about the 10th of July, by Messrs. J. Sabb & Co., auctioneers, corner of Fourth street and Lafayette place.

THE Gayety Theatre, Albany, will open for a short season on the 30th, under the management of J. W. Albaugh. The company will consist of Miss Jennie Parker, Mrs. J. M. Barron, Mrs. Murrell, Miss Lewis, Miss Gardner, Mrs. J. W. Albaugh, S. K. Chester, E. B. Bishop, J. M. Barron, C. Kane, J. B. Curran, Fay, Chesnut, Degan.

The greatest living tragical poet of Italy, Giovan Battista Niccolini, now eighty years old, was lately received by the King of Sardinia at Florence. He presented his majesty with a copy of his "Arnaldo da Brescia," an historical tragedy, condemned by the Court of Rome. This gift was graciously accepted, and the poet complimented for his having foretold the regeneration of Italy.

THE UNITED STATES SENATE.—The Senators whose terms expire in 1861, and whose places are to be filled by the next Legislatures of their States, are Fitzpatrick, of Alabama; Johnson, of Arkansas; Gwin, of California; *Foster*, of Connecticut; Yulee, of *Florida*; Iverson, of Georgia; *Trumbull*, of Illinois; Fitch, of Indiana; *Harlan*, of Iowa; CRITTENDEN, of Kentucky; Slidell, of Louisiana; Pearce, of Maryland; *Green*, of Missouri; *Clark*, of New Hampshire; *Seward*, of New York; Clingman, of North Carolina; *Pugh*, of Ohio; Lane, of Oregon; Bigler, of Pennsylvania; Hammond, of South Carolina; *Collamer*, of Vermont; and *Durkee*, of Wisconsin—14 Democrats, 7 Republicans, and 1 American.

THE MOVEMENTS OF MORRISSEY.—An Albany paper says: John Morrissey, the pugilist, left for New York last evening. His object being, we believe, to meet Heenan on his return, (the steamer being due to-morrow,) and to see whether that gentleman stands back up his recent challenge by money. *Morrissey means business.* We were the first some time since to announce the fact that a match would probably be made between these men, but such wise sayings as the *Troy Times* have seen fit to dispute it, and, with a bombast quite as remarkable as it was impudent, endeavored to show that no one, except themselves, could announce the truth with any degree of accuracy. *Apropos* of the above, we understand that arrangements have been made for a long day of sport between "Abe" Fewler and Morrissey, for the sake to the latter of his beautiful garden and house on the Millville road—to be used as a sporting house and *training ground*.

NEW USE FOR LAGER BEER.—A correspondent of the Petersburg *Express* recommends lager beer as a splendid article for promoting the growth of flowers. He poured a bottle of beer upon a fuschia, and thus describes the effect:

"On the morning after the fuschia was in full bloom, and attributing the extraordinary rapidity of this efflorescence to the vital force of the beer, he imparted this secret to all of his acquaintance. There has since been a great demand for lager to pour upon flowers."

NAPOLEONIC INTRIGUE.—Some of the English papers assert that Louis Napoleon is actively intriguing to bring about the annexation of Belgium to France. They say that many French agents are constantly going about the provinces close to the French frontier, pointing out to the laboring classes the inestimable blessings of the paternal rule of the Emperor Napoleon. Money is not spared, and several large manufacturers are *said* to have promised their support.

RARE AUTOGRAPH.—The editor of the Norfolk County *Journal* has seen an interesting autograph of the patriot Garibaldi. It is affixed to a bill of lading of copper, per brig Carmen, from Genoa to Boston, consigned to the late Benjamin Gerry, and dated April 20th, 1863. This is the brig which Garibaldi owned while in South America, and which he commanded on its voyage home last year.

REV. F. Dwight, Professor of Rhetoric and English Literature in Brown University, has been chosen to fill a newly established Professorship of English Literature and Elocution in Princeton College.

THE MUSICAL CONVENTION OF PENNSYLVANIA.—The annual convention of the Musical Association of Pennsylvania commenced its session at Harrisburg on Tuesday evening last, with a large attendance of members. The following officers were elected for the ensuing year: President, John Hood, of Philadelphia; Vice Presidents, Dr. Rudolph Zeisse, of Philadelphia, Dr. Jacob Zeigler, of Lancaster, Dr. Jacob Cassel, of Harrisburg, Dr. Jacob Ritter, of Pottsville, Dr. Jacob Ritter, of Lewisburg, Dr. Jacob Ritter, of Mauch Chunk, Dr. Jacob Ritter, of Reading, Dr. Jacob Ritter, of Bethlehem, Dr. Jacob Ritter, of Allentown, Dr. Jacob Ritter, of Easton, Dr. Jacob Ritter, of Chester, Dr. Jacob Ritter, of Norristown, Dr. Jacob Ritter, of Pittsburg, Dr. Jacob Ritter, of Erie, Dr. Jacob Ritter, of Meadville, Dr. Jacob Ritter, of Wilkesbarre, Dr. Jacob Ritter, of Scranton, Dr. Jacob Ritter, of Williamsport, Dr. Jacob Ritter, of Lancaster, Dr. Jacob Ritter, of Harrisburg, Dr. Jacob Ritter, of Chambersburg, Dr. Jacob Ritter, of Gettysburg, Dr. Jacob Ritter, of Carlisle, Dr. Jacob Ritter, of Mechanicsburg, Dr. Jacob Ritter, of Shippensburg, Dr. Jacob Ritter, of Bloomsburg, Dr. Jacob Ritter, of Danville, Dr. Jacob Ritter, of Lewistown, Dr. Jacob Ritter, of Mifflintown, Dr. Jacob Ritter, of Selinsgrove, Dr. Jacob Ritter, of Sunbury, Dr. Jacob Ritter, of Milton, Dr. Jacob Ritter, of Williamsport, Dr. Jacob Ritter, of Jersey Shore, Dr. Jacob Ritter, of Coudersport, Dr. Jacob Ritter, of Ralston, Dr. Jacob Ritter, of Towanda, Dr. Jacob Ritter, of Troy, Dr. Jacob Ritter, of Tioga, Dr. Jacob Ritter, of Wellsboro, Dr. Jacob Ritter, of Mansfield, Dr. Jacob Ritter, of Blossburg, Dr. Jacob Ritter, of Corning, Dr. Jacob Ritter, of Elmira, Dr. Jacob Ritter, of Towanda