

## JEAN MARTIN CHARCOT.

The life of the great Charcot came to an end unexpectedly, while he was temporarily staying at Morvan, about the middle of August, says the New York *Medical Journal*. Bourneville, a former pupil and colleague of Charcot's, writes in his journal, *Le Progres Medical*, that "death came on suddenly to the great master, and nothing had occurred to enable his friends to forecast such an event." Recent visitors to his clinique at the Salpetriere had not failed to notice a loss of muscular vigor, a shambling gait at times, and a suggestion was awakened in the minds of many that the nervous and muscular apparatus of the great teacher were no longer so well attuned to one another as formerly. His vigor of mind and intentness of interest in scientific subjects were, however, in no wise abated.

The artistic element in Charcot's character was strong, and, with the qualities he possessed for acute observation and crisp description, helped him to place neurology on the high plane that it occupies to-day. Of his power as an observer or clinician, an editorial writer in the *Lancet* has said: "He is worthy to rank with Trousseau and Laennec." As a delineator or "word painter" he excelled. From the time of his early thesis on chronic pneumonia, about 1860, until his late psychological studies—for during recent years he has been concerned with those subjects rather than with his former problems in neurology—he has had no equal in graphic teaching. His artistic faculty found expression in the *Nouvelle iconographie de la Salpetriere*, in *Les demoniaques dans l'art*—by himself with the artist Richer—and in the collection of illustrations adorning the walls of his consulting rooms. These illustrations have for their chief theme the ancient conception of hysterical or epileptic "possession," an imaginative conception largely, on the part of the various artists, but based on facts. Charcot was on the *qui vive* for illustrations in the neurological field, and few teachers have availed themselves more fully than he of the improved processes of photography and other graphic methods. Charcot was great as a pathologist, and he was not hindered by the advance of years from continuing his work in that direction. He was a man of wide general attainments, interested in the sciences outside of medicine, and conversant with the literature of other countries as well as his own. His linguistic attainments were remarkable, as has been demonstrated at many a congress in England and on the Continent. His voice will be greatly missed at the Roman Congress in 1894.

In conclusion, to quote again from Bourneville, "Science has lost in Charcot one of her most eminent and most noble representatives; France has lost one of those men who brought her added honor and contributed to her greater reputation throughout the whole world." Charcot was born in Paris in 1825; he was, therefore, not more than sixty-eight years old at the time of his decease. The list of his contributions to medical literature is too great to be enumerated here. He was a member of the Institute of France and of many other societies in his own country and in others.

*L'illustration*, to which we are indebted for the accompanying cut, says:

Charcot was elected to the Academy of Medicine in 1873, ten years before entering the Academy of Sciences. During this interval the chair of clinic of nervous diseases was established for him. It is impossible, in a short article, to enumerate the vast amount of scientific work that Prof. Charcot left behind him. It is not too much to say that Prof. Charcot discovered the various laws and peculiarities and has made a classification of all the diseases and ailments of the nerves and marrow. He made a most profound study of and practically created that new classification in pathology popularly known as locomotor ataxia, aphasia, illusion, and nervous disorders of a high grade. This celebrated savant, with Cæsarian profile, bright eye, strong lip, and genial expression, brought about him a group of scientists known as the school of Salpetriere, which has flourished, developed, and spread out until it has added permanent distinction to the scientific reputation of the French nation.

## Bacteria and Colds.

According to the Berlin correspondent of the *Lancet*, Professor Schenk has found that micro-organisms move toward warm points. This movement he terms thermotaxis, and he concludes as the result of experiments with a specially constructed apparatus that warmth acts as a stimulant on micro-organisms, which



PROFESSOR CHARCOT.

move toward a warm body in their neighborhood, and that this thermotaxis is a vital property of bacteria. The professor further considers that in certain cases of "catching cold" an infection is conveyed by bacteria. Thus a person entering a cold room would attract the bacteria present by his warm body, and these, finding admission through the skin or otherwise, produce, after a certain time of incubation, the results ordinarily attributed to "catching cold." The hair bulb sheaths, sweat glands, and mucous membranes are all said to offer possible points of entry to bacteria.

## WILLIAM GALLOWAY'S EXHIBIT OF ART POTTERY.

The art pottery and terra cotta exhibit of William Galloway, of 1711 Chestnut Street, Philadelphia, in the Manufactures building of the World's Columbian Ex-



THE WORLD'S COLUMBIAN EXPOSITION.—ART POTTERY AND TERRA COTTA EXHIBIT.

position, affords a strikingly beautiful exemplification of the perfection to which this class of work has been brought. This pottery was established in 1810, and makes a specialty of statuary work, fountains, garden vases, flower boxes, jardinières, and architectural and decorative terra cotta. The figure at the right in our illustration showing the exhibit is a representation

of Gibson's Psyche, while that at the left of the picture is the "Dancing Girl," by Canova; the "Turtle Catchers," by Ferd. Mersemann, and "The Fishers," by Carl Storck, forming two of the many intervening pieces. A very good idea of the variety and high artistic character of the work made at this establishment, including reproductions of Egyptian, Greek, and Etruscan vases, and statues modeled after the work of the most famous sculptors, may be obtained from the illustrated catalogues, which are mailed free on application. The exhibit received the first award of its class.

## Dynamite Rain Making.

Another experiment in rain making in New England was recently tried at Bloomfield Conn., when several half-pound dynamite cartridges were sent up attached to fire balloons. The New York *Tribune* says the tobacco growers had gathered in large numbers, hoping for the salvation of the tobacco crop, already badly damaged by the intense heat and the drought.

A wire was tied to the cartridge and tied to the bottom of the balloon. Attached to the cartridge was a fulminate cap, and to this a fuse a little over six feet in length, regulated to burn three feet each minute. The light was touched to the end of the fuse and the balloon released. It sailed upward, and the dangling fuse began to leave behind a trail of smoke. It rose until at the end of two and a quarter minutes the red and white sphere changed instantly into a cloud of black smoke. The spectators saw the balloon shattered and two seconds later heard a terrific report. Mr. Chappel said the balloon was about 4,000 feet high when the cartridge exploded. A second balloon was sent up. A longer fuse was used, and four and a half minutes after the balloon had been released the cartridge exploded at an altitude of about 6,000 feet.

The third cartridge sent up was as big a success as the ones before it, and orders were given to the experts to send up the remainder of the fifty balloons and cartridges as quickly in succession as possible. The next balloon was prepared and released. It rose a dozen feet, when it was caught in a current of air and sagged. The paper near the base took fire, and in a moment the balloon began to descend, while the flames began to envelop it from bottom to top.

The mass of fire with a dynamite cartridge dangling from it created a panic and scattered the crowd in all directions. The long fuse kept eating its way toward the bomb, and it would be at least four minutes before the cartridge would be touched off in the regular way, but there was danger that the fire from the balloon would ignite the fuse close to the cartridge. Mr. Stevens and Mr. Chappel kept their wits about them, and as soon as the fuse could be reached tore the cartridge from the flames, and the balloon sank to the ground a crumpled mass. It was decided that it would be too risky to have a repetition of the accident, with people standing around in danger, and the experiments were cut short.

## Fuel of Steamers.

The American liners New York and Paris burn about 330 tons of coal per day, or about 30,800 pounds per hour, and maintain about 18,000 indicated horse power, which is equivalent to a coal consumption of 1.71 pounds per hour per horse power. The average for all the fast ships with triple expansion engines, like the New York, Paris, Majestic, Teutonic, and Furst Bismarck, is probably only about 1.75 pounds per horse power hour. In the case of the Umbria and Etruria and similar ships, which have only compound engines, the rate is higher. For example, the Etruria burns as much coal as the New York and more than the Teutonic and develops far less power than either of them, which illustrates the great advance made in marine engineering by the introduction of the triple expansion system.

ONE of the first tunnels in the United States was on the Alleghany Portage Railroad in Pennsylvania. It was nine hundred feet in length and was finished in 1831.