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PASTEUR.

If the measure of human greatness is to be found in the amount of blessedness that a man's life and work bring to his fellowmen, there has lately passed from our midst one of the greatest of all great men. The moral philosophers tell us that the pursuit of pleasure and the avoidance of pain are chief among the natural instincts of man. If this be so, Pasteur has done more to ameliorate the condition of the race than any one man, living or dead. And it was all done so quietly. There was no ostentation; no preliminary flourish of trumpets; none of that striving for dramatic effect which is popularly, and we think all unjustly, supposed to characterize the people among whom he lived, worked, and died.

A man of firm convictions, unwearied patience, indomitable courage, and with unlimited capacity for work, he lived in the laboratory. In its quiet seclusion he wrestled with and conquered problems that had baffled the most learned savants of his own and all previous ages.

Born at Dole, France, on December 27, 1822, he early showed a love for the study of chemistry. He entered the Ecole Normale at Paris, where he followed up his researches in his chosen line, and afterward at Sorbonne he further prepared himself under the tuition of M. Dumas, whom he was to succeed in later years at the Academie Francaise.

Pasteur's first great work was accomplished in the years 1865-66, when he was called upon to investigate the silkworm plague, which was destroying one of the great industries of France. He at once stated that the plague was due to a parasite, and that it could be stopped by destroying all worms and eggs that were affected. This statement was met with ridicule. He was told that the pest would still be propagated by spontaneous generation. Pasteur denied that there was such a thing as spontaneous generation. He proved the truth of his theories, his advice was followed, and the plague was checked.

He then turned his attention to the phenomenon of fermentation, alleging that it was caused by animalcules. He claimed that if all germs could be excluded, fermentation would be impossible. Again he was met with ridicule, and with the old cry of "spontaneous generation." To prove his point he carried out experiments in pure mountain air; and he showed conclusively that at that altitude where the air was free from germs no fermentation did or could occur; and that, therefore, "spontaneous generation" was, as he had all along contended, a myth.

It was a natural sequence to these successful experiments, that Pasteur should next investigate the diseases of men and animals.

He had already proved that the deadly silkworm plague was due to the action of living organisms; he now argued that the contagious and infectious diseases of men and animals were probably caused and sustained in the same way. His investigations proved the theory correct; and he soon had brought a large number of the deadly diseases within control.

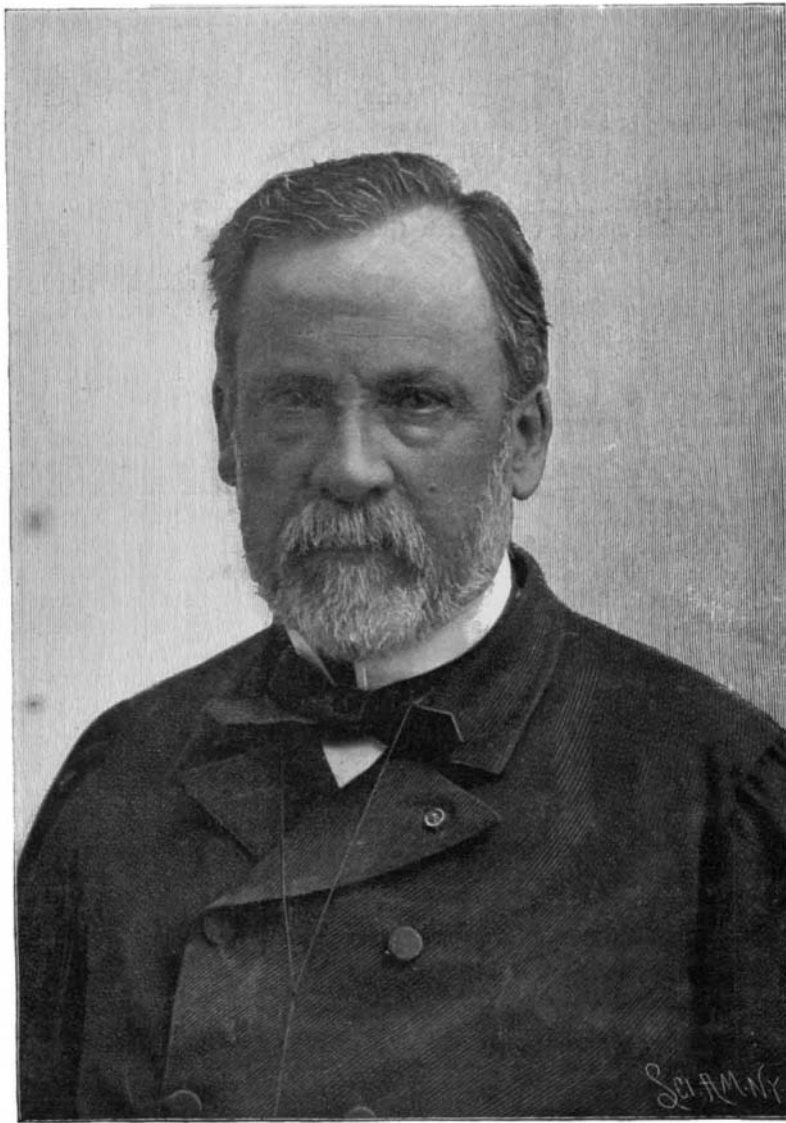
The investigations of his later life were directed more particularly to the cure of that horrible malady hydrophobia. For a while public opinion, both lay and professional, was divided as to the merits of his cure. Today, however, there is a wide and increasing belief in its efficacy. From all parts of the world victims of the hydrophobic bite are flocking to the famous institute for treatment. It is a fact that no patient who goes there sufficiently soon after being bitten to give the treatment time to grapple with the poison is ever known to die in the hospital.

Louis Pasteur is the father of the "germ theory" of

diseases. Previous to his discoveries the practice of medicine in treatment of diseases was largely "guess-work." Necessarily so; for how shall a man treat correctly a disease the essential nature of which is a mystery to him?

Physicians were groping in the dark; wrestling blindly with a foe that they could not see, and that was manifest to them only by its fatal effects. Pasteur has thrown the clear light of science upon this foe, and has shown to the medical world its origin, its method of growth, and the extent of its powers; and, best of all, he has put into the hands of the physician a sure means for its extermination.

Diphtheria, cholera, and hydrophobia have been stripped of their terrors; consumption soon will be; and it is reasonable to expect that before another de-



PASTEUR.

cade has gone by there will not be a single disease that is not fully under the control of the physician.

Such was the life-work of Pasteur. He is dead; but his healing touch will be felt to the end of time. If ever fame can render a man "immortal," it will be to Louis Pasteur that the generations to come will give the title with grateful reverence.

The Cost of Pauperism.

A British blue-book has just been issued containing the poor rate return for the year ended Lady Day, 1894. The principal items of expenditure were: Maintenance, £2,198,312; out-relief, £2,460,503; maintenance of lunatics in asylums or licensed houses, £1,466,185; workhouse or other loans repaid, and interest thereon, £677,082; salaries and rations of officers and superannuation allowances, £1,629,061; other expenses, £1,242,362; total, £9,673,505, or \$48,367,525. In comparing the expenditure of 1893 with that of 1894, under every item in the latter year there was an increase.

What Electricity is Doing.

The Mining and Scientific Press thus sums up the uses to which electricity is applied. It enters into the preparation of what we eat, drink and wear, and there are many articles of utility now produced by its aid. The residents of many cities in the United States have their houses protected, lighted and heated by electricity. They go to their places of business in cars run by electricity, the elevator by which they reach their office in high buildings, or the machinery in their factory, is run by electricity. The bell which summons them to church is rung by electricity and the church organ is played by electricity. Electricity brings the news to them from all parts of the earth; stamps their letters, automatically sounds the alarm in case of fire, rings the door bell, cooks the food, and fans them while eating it. When they go to the dentist their teeth are drilled and filled by electricity, and miniature electric lamps are now constructed for the use of doctors in diagnosing diseases. The patient swallows a lighted lamp, which illuminates his person so as to enable the physician to make a correct diagnosis. The barber cuts or sings the hair by means of electricity, the streets are lighted and the farm cultivated by it. By means of it we can talk with our friends 500 or 1,000 miles away and hear their voices as distinctly as though they were in the same room. The telephone is perhaps in more general use in this country than electric lighting. Even in small towns telephones form a part of the furniture of many private houses, and are used to transmit orders to the butcher, baker, etc. There are now some 85 electric railways in the United States and 9,000 miles of track employing 23,000 cars. With the aid of electricity natural forces which have heretofore run to waste are being turned to the service of mankind. The American River has already been made to furnish motor power by which Sacramento is lighted, and by which its street cars and factories are run, and new projects are in progress all over the State.

The Inventor of the Polka.

"The origin of the polka is not generally known, the inventor of the dance having been a young Bohemian girl named Haniczka Selezka. She was a blooming young peasant maiden, and the best dancer in the village of Costelec, on the River Elbe, and used to perform solo dances of her own invention at the various village festivities. It was in the year 1830, at a farmhouse, that the assembled guests asked her to dance a solo, and she said, 'I will show you something quite new,' and to the music of her own singing she danced the polka step, though with more elaboration than it is now performed. The dance became so popular that it was later made a national dance, and Haniczka named it Pulku, as she said it was danced in short steps; from Pulku came Polku, and finally Polka, the dance three years later, in 1830, becoming popular in Prague, and in 1839 it was already danced at the Vienna balls, and one year later became the most popular dance in Paris. Haniczka Selezka is still alive, surrounded by numerous grandchildren and great-grandchildren sprung from her own six sons and daughters."—The Etude.

ASTHMA.—At the moment of the attack spray rapidly the back of the patient with chloride of methyl, from above downward and from below upward. The attack will cease in a few moments; if not, spray lightly the upper part of the chest. If the skin be delicate, as in women, cover the parts with a bit of fine gauze and make the strength of the spray proportionate to the strength of the patient and the violence of the attack.—Tsakiris, Medical Record.