

Pasteur as Artist.

By GUSTAVE MONOD, M.D.

I AM representing to-night the "Association pour le Développement des Relations Médicales," of the Faculty of Paris, and I convey to you the friendly greetings of its President, Professor Hartmann, and members, whose pleasure it is to join with you in the demonstration of homage and gratitude to Pasteur.

Pasteur the Artist.—Great personalities may be studied under different aspects, and we might consider Pasteur under those of the pioneer, the professor, the polemist, the patriot, the believer, or what he was to such an extent, the family man. But I must limit myself to my title.

I want to show you Pasteur, not only as an artist, in the accepted term, that is one "who bears in his heart an ideal of beauty and who follows it," (remember these words, we shall hear them again), but as an artist in the Latin sense of the word "artifex"; a man who expresses this ideal in his work.

From his childhood he knew how to represent what he saw, and later on his discovery of the *microcosm* was the work of an experimenter who observed with exceptional acuteness and whose imagination was as honest as it was bold.

I have brought for exhibition reproductions of twenty drawings by Pasteur. These were published in 1910—fifty collections—and although excellent, they hardly convey the impression of the originals. I have seen these pastels recently; they are owned by his son-in-law, M. Vallery-Radot, author of the *Life of Pasteur*, the "Histoire d'un Savant par un Ignorant."

M. Vallery-Radot has reconstituted the home of Pasteur in his mansion at Versailles. We see his furniture, his work-table, his book and the pictures he loved best; amongst them the photographs of his friend Sir James Paget, portraits of him as a young man, and most touching of all a drawing of the calm face of the great man in his last sleep. But what touched me most of all in his sanctuary was the presence of Pasteur's own daughter, with her noble features so strikingly like her father's, reflecting the glory and the tenderness which illuminated her childhood. In this private museum the whole life of Pasteur is told in pictures.

Arbois is a little town of eastern France at the foot of the Jura; its hills and clear, rapid streams recall the Highlands of Scotland. If we imagine ourselves back in 1831, we can picture a band of noisy children coming home along the river bank from fishing. One of them, a boy small for his 13 years, attracts attention by his thoughtful expression, and the passers-by smile, saying, "This is Louis, the son of M. Pasteur, the tanner, our young artist." For Louis Pasteur, without being in any way an infant prodigy, early distinguished himself by his aptitude in drawing. Doubtless, if we possessed his boyhood's exercise books, we should find in the margins more or less unskilful sketches of his comrades taken from life, and I venture to say, caricatures of his first masters, among them naturally that of the teacher of drawing at the school, M. Pointurier; he was a jovial man not devoid of talent; he drew as

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naturally as he breathed, and allowed his pupils to develop faculties according to their natural bent. But Louis at the age of 13—the age of daring—dared to attempt a real portrait. Ah! if he could fix upon the paper the most familiar, the dearest, the loveliest of faces. . . . His heart tells him that though the busy grown-up folk will not find time to sit for him his mother will understand her child. The others have faces that are unknown and difficult, but the face of his mother is a landscape of which he knows every secret. “Oh, mamma, you must put on your pretty shawl and your Sunday bonnet!” Here is the portrait; nearly a century has passed over the powder of the pastel, but we see how seriously she played her part. She sits rather stiffly within the rigid folds of her plaid shawl; the perfect order of her coiffure is framed in an



House where Pasteur was born in Dôle (with a commemorative plate above the door).

impeccable bonnet. At a first glance her features seem rather severe, doubtless the length of the sitting had its effect . . . but if we look a little closer, do not her lips appear a little—very willingly—compressed? Can we not detect a desire to smile, a desire suppressed so as not to discourage her boy, who is struggling to do his best? I think so, for in the eyes glistens a happy light, which sees a little artist, silent, grave, absorbed in his work, dominated by the creative effort. . . .

And if we analyse this drawing, we see with what scrupulous care the child has brought out every detail, and here are the qualities which later on will guide the scientist.

Three years afterwards Pasteur, on the eve of leaving for the first time for

Paris, tried to catch the features of his father. As you will recognize, there is a certain poignant sadness in this portrait. Is it produced by the coming separation, or by a secret uneasiness due to the leaning towards an artistic career of a son for whom he dreamt of a more certain destiny?—for his ambition was to see his son a future rector of the college of Arbois! Or is it the bitterness of the ex-soldier of the Grande Armée who knows the vanity of glory? “I can still recall,” said Pasteur forty years later, on looking at this portrait, “I can still recall this sadness of my father.” This drawing is not signed. Doubtless, it remained unfinished. In my opinion it is the most impressive of Pasteur’s drawings—the technique is more assured, and the analysis remains as moving in its keen, observant tenderness.

These two portraits call up the remembrance of some of the most touching words by Pasteur. In 1883 Pasteur, on visiting Dôle and seeing the house in



Pasteur's mother. (Pasteur del., aged 13.)

which he was born, and on which his fellow townsmen were fixing a commemorative tablet, invoked the memory of his father and mother, and all they had had done for him. Pasteur, deeply moved on remembering his early childhood, let his heart overflow, and to this emotion he gave expression in the following words :—

“ O father, O mother, O my beloved ones who have gone before, you who lived so modestly in this little house, it is to you that I owe everything. Valiant mother, you have filled me with your own enthusiasm. And you, dear father, whose life was as hard as your work was hard, you have shown me what patience can do in continued effort. To look up, to *learn beyond*, to try to rise ever higher, that is what you have taught me. I bless you both, my dear parents, and *yours* be the homage done to this house to-day.”

Shall we say that he owed his enthusiasm to his mother and his faculty of

hard work to his father? To his mother his gifts as an artist, and to his father his qualities as scientist? Let us beware of too subtle a discrimination. I have quoted these noble words of the son only to make you understand the deep meaning of these two pictures.

But to return to his career as an artist. He left home for Paris in 1836, but not for long—he could not bear to be so far from home—and his father took him back to Arbois, where his school work left him ample leisure for painting. He hesitates as to his vocation, a period of uncertainty in which he listens alternately to the voice of Art and to that of Science calling him at the same time. It is in this short time that he produced most of the drawings that you see here.

You see a vine owner with a young and refined face, wearing a stock like an ancient politician. And now the delightful portrait of a little boy, who in



Pasteur's father. (Pasteur del., aged 16.)

some measure recalls Velasquez. He is charming with his pink cheeks, and the likeness was such, that M. Vallery-Radot, who had never seen him, recognized, many years later, a distant cousin of the original in Arbois. Next the portrait of Mlle. Roch, No. 12, which might be called the "Lace Collar," in which we notice the same minute detail as in his mother's portrait. The very threads of the lace collar, the detail of the hair, are treated with the same minute care. You might think that the portrait is made up of several miniatures. The ophthalmologists here present have already diagnosed that these drawings are produced by short sight. I insist on this, because the eye for detail in the artist will be as sharp in the scientific man.

And here is the 80-year-old nun, Sœur Constance Parpandet, who was born in those times when George the Second was King of England. I do not care

so much for these more elaborate portraits. There is less simplicity and more craftsmanship about them.

We are now coming to the end of his career as an artist. He goes to the Lycée of Besançon in 1839. His drawing master takes a great interest in him and shows him *how* to draw, and at once he loses his personality. "I am making great strides in colour," writes Pasteur, "if not in resemblance." Oh the evils of teaching!

If a child is likely to develop too early, if he shows a disturbing originality, if he is threatened with genius, let him be sent to school. At school our artist loses his vigour. Look at the pretty—the too pretty—print of Chappuis, Pasteur's school-fellow. "I have never done anything so well drawn nor so like. The head master thinks it is very good!" (Yes, but it is the very opinion of the head master that disturbs me!)



Portrait of a nun, with the inscription, "Seur Constance Parpandet, agée de 82 ans."
(Pasteur del., aged 18.)

The last pastel is dated 1842. It was the portrait of Marcou, who afterwards taught geology at Cambridge, Massachusetts. Durant-Greville, who saw this portrait in America, wrote of it: "Many painters awarded medals at the Salon have never drawn or modelled a mouth with such precision. If Pasteur had wished he could have become someone of standing among painters, and—who knows?—perhaps a very great painter." In the year this portrait was drawn Pasteur entered the *École Normale* in Paris.

Is it not evident that Pasteur passed through a crisis? He loved his art passionately, but saw that his duty lay elsewhere. He broke off suddenly as if he had made a promise to himself to give up being an artist. If not, how are we to explain why he never re-opened his pastels box and why, he who had taken so much pleasure in drawing the children of other people, resisted

the pleasure of completing this collection of family portraits. That remains his own secret.

This does not mean that the artist was dead in Pasteur. Throughout his life he was faithful to his interest in painting; he never missed a Salon, and found time frequently to visit great national galleries. At Dresden, for example, his first visit—to the astonishment of his hosts, who awaited him at the laboratories—was devoted to the Museum. Among his intimate friends were many artists, among them the sculptors Paul Dubois and Perrault, the painters Henner and Eberfeldt. But Pasteur drew no more.

One of his friends who lived in daily intimacy with him, told me that he never suspected that the scientist was an artist, so much had scientific research monopolized his thoughts.

Without discussing the relations of Art and Science, I will only recall Pasteur's own expression and apply it to scientific imagination—"to learn beyond," and this sums up all Pasteur's work.

Pasteur is now at the École Normale, and here in the branch of Science in which he specializes his faculties as an artist are strengthened and developed. He remains a visionary, that is to say a mind in which the faculties of observation and imagination predominate. For instance, having taken up chemistry his curiosity bears on one of the most arid branches of this science and one in which investigation relies entirely on the eye, namely, optic chemistry: crystallography. His short-sighted scrutinizing eye, this eye of an artist as implacable as a sensitive film, will let nothing escape it, either the formation of the crystal, or its orientation, or the relation of its angles.

Where specialists, such as Mitcherlich, stop and fall back on the mystery of the racemates, a Pasteur *learns beyond* and discovers the mirror dissymmetry of the right and left tartaric acids. I believe that it is owing to his early analytical drawings that the artist has trained his eye to the analysis of crystals. In other words he has given us the portrait of his crystals with the same vigorous observation and passionate imagination.

"It was necessary to have seen Pasteur at his microscope," wrote Dr. Roux, "to form an idea of the patience with which he examined a preparation; moreover, he examined each object with the same minute care. Nothing escaped his myopic eye, and we used to say in jest, that he saw the microbes growing in the media." With the study of fermentations began the ascent: investigations of wine; silkworm disease; investigations of beer; virulent diseases; virus vaccines; the prophylaxis of rabies. Link by link the artist built, and the experimenter forged, the chain of genius.

At the celebration of the Centenary of Pasteur two months ago, at the Academy of Medicine, we were introduced to two different conceptions of Pasteur. President Béhal showed us a very human Pasteur, whose studies were not specially brilliant. "He was not a genius," said he. But Professor Widal looked upon Pasteur as one of those providential beings, created by nature to renew the orientation of science, and who was gifted with the spirit of intuition—a true genius. Of these two conceptions, the former is the more encouraging to us, and if he is the offspring of his work, of his method and of his will, there is no unbridgeable gulf between his mind and ours. "Pasteur soared above concrete experience. Without imagination the scientist would have stopped at experimental facts. Artist, he swept the infinite with a single cast of his line." That is what Professor William Bulloch has shown, when he speaks of "the work initiated with so much imagination and carried out with such incomparable skill by Louis Pasteur."

I trust that I have proved my point, and that I have succeeded in helping you to know Pasteur more intimately.

You know that Louis Pasteur rests in the crypt of the Institut Pasteur, a shrine worthy of him. On the door is one name only, but, above the tomb, the artist has engraved a quotation. The word "art" has the first place—deservedly. Here is the quotation: "Heureux celui qui porte dans son cœur un idéal de Beauté, et qui lui obeit, idéal de l'Art." "Happy is he who bears in his heart an ideal of Beauty and who follows it. The ideal of Art, the ideal of Science, the ideal of one's country, the ideal of the Virtues of the Gospel." These immortal words sum up the life of Pasteur, the Believer, the Patriot, the Scientist; and of Pasteur the Artist.

Sir HUMPHRY ROLLESTON: Your Excellency, ladies and gentlemen,—Your President has the duty of thanking those who have spoken to us to-night, but in one respect you will agree with me that he has not quite completed his duty, for he has said nothing about the charming address we had from him dealing with Pasteur as a man and as a medical pioneer. Among the many attractive points which your President made, none perhaps struck home more securely than that Pasteur owed much of his success to his wife, and the sympathy that existed between those two, thus showing that Pasteur the great man resembled some of us smaller men in a similar debt to their better halves. Now, not only do we owe a great deal to our President, to which he, of course, could not draw attention, but we owe a great deal to him and the Royal Society of Medicine for taking this opportunity of paying a compliment, so well deserved, to the genius of Pasteur and to the French. We are delighted that they have thus enabled us to-night to do what, with the most gracious courtesy, the Academy of Medicine of Paris did earlier this year in their celebration in honour of Edward Jenner. And it seems to me, and I am sure must seem to you, that this indeed should be a year of good augury for national friendship, for there have been these two celebrations: the centenary of Jenner's death, in Paris, and this celebration in honour of the greater Pasteur's birth a hundred years ago. Let us also express our admiration for the address of Professor Lowry, who has journeyed from Cambridge to give us this extremely clear account of the physico-chemical activities of Pasteur; and, perhaps most of all, to Dr. Monod, of Vichy, who has made the longest journey, for his brilliant speech on Pasteur, which had only one fault, its extreme shortness.

Sir STCLAIR THOMSON: It is a mere matter of form on my part to second this vote of thanks. You will be expected to show your appreciation by what the Bible calls "a cheerful noise"; but I feel quite sure that it is not by the noise you will make, but by the silence, the deep and profound silence which you have maintained during the last one and a half hours, that you demonstrate your appreciation of the speeches of this evening. They have shown to us Pasteur as a man, as a scientist, and as an artist. In his opening speech, the President said that science had no frontiers, and although we welcome science, whether it comes from the other side of the Rhine or from the other side of the Channel; and although we agree that science has no country, still scientific men have their nationalities, and it is a great delight to us to have had placed before us, in this exquisite address of your President, the personality of Pasteur, who is the greatest of Frenchmen. I was motoring through Savoy once with a French friend, Dr. François Helme, and his motor car broke down. While his chauffeur was putting it right, children gathered round the car, and Helme said it might interest me to see how French children were educated. He said to a little girl: "What standard are you in?" She replied, "The fourth." "That's all right. Now tell me who was the greatest Frenchman who ever lived?" What do you think she answered? "Louis Pasteur." Then he said, "Tell me the name of another great Frenchman, a great soldier," and she said, "Napoléon Premier,

Monsieur." Then he said, "Who was Shakespeare?" And she replied, "A great poet of England." That is a lesson for us to learn from France, their appreciation of great men; and it is a more striking lesson to know that their children are taught that the greatest of great Frenchmen was Louis Pasteur.

(The resolution was carried by acclamation).

Sir WILLIAM HALE-WHITE (President): I speak on behalf of the distinguished colleagues who have addressed you when I say that we all three thank you most heartily for having passed this vote of thanks.