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MIKE LAUPANCE

DID THIS MAN INVENT PHOTOGRAPHY IN BRAZIL IN 1832?



Altema Studio, S. Paulo

BY HARVEY V. FONDILLER

Jan. 21 (1834)—“It is very probable that one can photograph drawings in a silvered form . . .” The writer: Hercules Florence, native of France, resident of Brazil. Was he first to use the word *photography*, first to make photographs with a camera, years before the announcement of the invention of the heliographic art? The

**DID THIS MAN
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eminent historian Beaumont Newhall has written: "Photography has no single inventor. At the same time, distantly removed from one another, experimenters were working on the same problem unaware of each other's work until, in January of 1839, an an-



Photo by Harvey V. Fondlier

Boris Kossov, Director of the Department of Photography, Art Museum of São Paulo, and key figure in the historical research of the Florence documents.

nouncement was made in Paris by the Academie des Sciences of the success of one of them, Louis Jacques Mandé Daguerre . . . What had been underground now came to the surface as other experimenters challenged Daguerre and claimed priority."

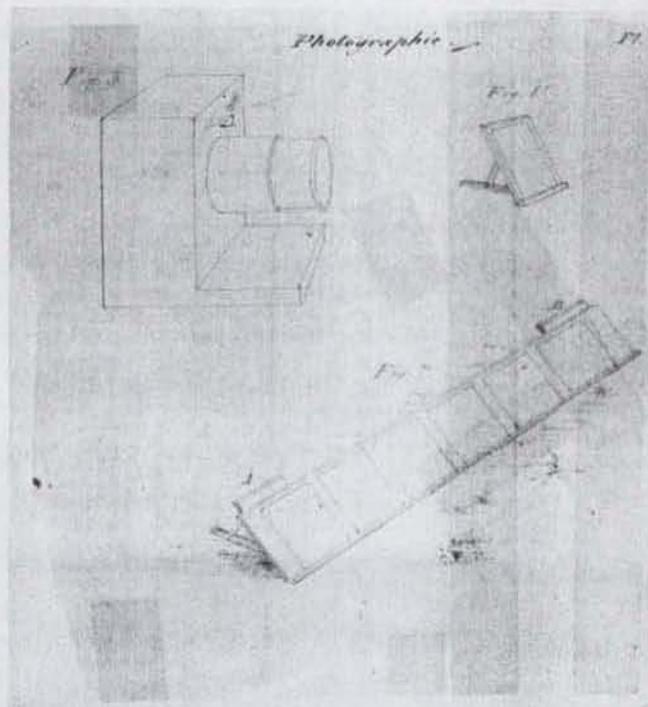
Hercules Florence was one of those experimenters in photography. Has he a valid claim to the homage due to those who belong in the pantheon of photographic history?

In reinterring the desiccated skeletons of scholarship from one graveyard to another, the historian attempts to clarify vague statements, conflicting reports, and questionable documents of long ago. In the case of Hercules Florence, the evidence, at first examination, appears convincing:

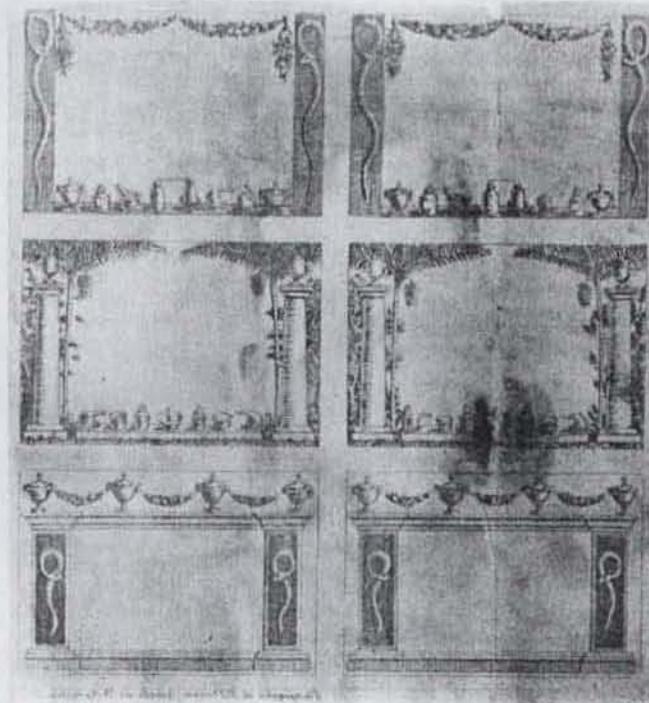
- Photographic reproduction (contact print) of a "Mason's Diploma." The paper bears an 1829 watermark.
- Photographic reproduction (contact print) of pharmacy labels, mentioned in an 1840 document.
- A drawing of Florence's *camera obscura* and other accessories for print-making, details of which are described in a manuscript dated 1840.
- Five volumes of handwritten manuscripts, including diaries dated 1830, 1836, and 1840; another volume dated 1840; and 170 pages of Florence's correspondence during this period.

These documents now belong to Florence's great-grandson, Arnaldo Machado Florence, who authorized the Brazilian photographic historian, Bor-

Important Hercules Florence documents

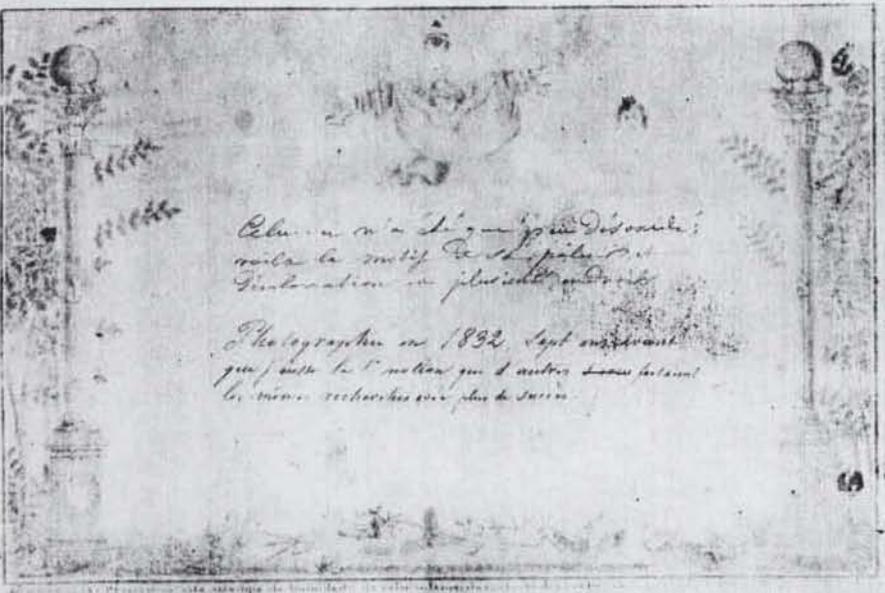


Original drawing of Florence's camera obscura and sunlight contact printer is undated, but matches description of a device mentioned in his journal, 1837.



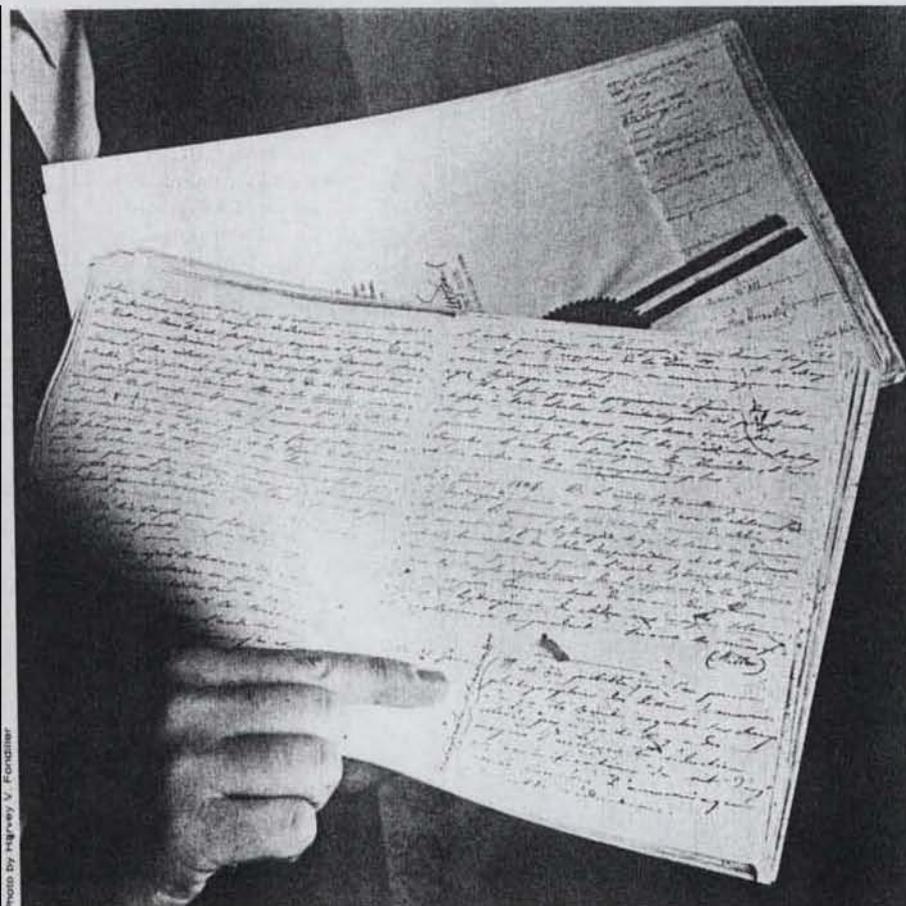
A photographic reproduction of pharmacy labels by contact-printing also is undated, emphasizes Florence's interest in graphic reproduction.

All photocopies by Hans Gunter Flieg



Alumna m'a dit que j'étais Désouvé;
mais le motif de l'opération
Fédération en plusieurs endroits
Photographie en 1832 Sept ans avant
que j'eusse lu l'article qui se trouve dans le journal
les mêmes recherches ont été de Suisse

Photographic print of Masonic diploma is dated 1832 (and paper is watermarked 1829), but notation apparently was made after the fact and does not provide firm proof.



Kossoy points to an entry, dated Jan. 21, 1834, in a Florence manuscript which states, "It is very probable that one can photograph drawings in a silvered form."

is Kossoy, to bring some of them to the United States in March, 1976.

Kossoy, director of the Department of Photography at the Art Museum of São Paulo, is a member of ASMP—The Society of Photographers in Communications. He was referred to me by Arie Kopelman, the organization's executive secretary. During several meetings, I examined the documents (or notarized copies thereof) and learned about a remarkable inventor who is virtually unknown outside his own country.

Boris Kossoy became interested in Florence in 1972 when he began researching the history of photography in Brazil. We are indebted to him for the documentation in his monograph, "Hercules Florence, Pioneer of Photography in Brazil," published privately in 1976.

Antoine Hercules Romuald Florence, a native of Nice, France, was the son of a surgeon in Napoleon's army and a lady of noble descent. Interested in the arts since childhood, he also showed an aptitude for mathematics and physics. A painter by profession, his desire was to see the world. When he was 21, the opportunity came with an invitation from the captain of the sailing ship *Marie Thereze*. After a 45-day voyage, Florence disembarked at Rio de Janeiro, Brazil.

Following a year's work for a French dress-shop owner, Florence found employment in the printing-shop/bookstore of the founder of the newspaper *Jornal de Commercio*. Four months later, he saw a newspaper ad: "A Russian naturalist, having to travel to the interior of Brazil, needs a painter. Qualified candidates may call at the Russian Consulate."

Leader of the expedition was Baron von Langsdorff, the Russian consul general, who selected Florence as second painter. With a botanist, astronomer, another painter, and numerous slaves, the group plunged into the Brazilian wilderness.

The expedition, which set out September 3, 1825, covered 8350 miles in three-and-a-half years. Florence's 82-page report of the journey and its perilous adventures was translated and published 46 years later by the Historical and Geographical Institute of Brazil (*Quarterly Magazine*, Vol. 38, 1875).

In 1829, Florence married and settled in Campinas (Villa S. Carlos). One of the first scientific papers resulted from his observations on animal sounds during the expedition: "Research on the Voice of Animals." He called these studies *Zoophonie*. He found it difficult to make copies of his research report, for there was only one printing press in the entire province of São Paulo. Thus did necessity spawn

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another of his inventions; he devised a printing process which he called *Poligraphie*. Later he experimented with the use of sunlight for graphic reproduction. In his search, he devised a process which he named *Photographie*.

Following are selected entries from Florence's journals:

Jan. 20, 1833—"Very important discovery. What I stated in the preceding entry of the 15th has just been confirmed today by two very successful experiments. Yesterday I made a very crude camera obscura with small box. I put in the hole of my palette a lens from a lorgnette . . . I placed the mirror, and inside, at a suitable height, a sheet of paper that had been saturated with a weak solution of silver nitrate. I placed this apparatus on a chair in a darkened room. The subject shown in the camera obscura was one of the windows with the pane closed . . . I left it for 4 hours . . . after taking out the paper, I found that the window was shown on it . . . but what should have been dark was light, and what should have been light was dark. But no matter—we'll soon find a remedy for that. Lest the remainder of the paper, and all that was light in the window, become dark in the daylight, I washed it without delay to remove the silver nitrate. What was already black lost none of its intensity to the sun in one hour; what was white became slightly dark, but not enough to make the image disappear . . ."

Jan. 21, 1834—"It is very probable that one can photograph drawings in a silvered form, because there are means of accelerating the reduction or intensification of the silver nitrate by light. Ammonia helps this reduction."

Feb. 19, 1834—"On white photography. One needs transparent paper such as used in commerce; one can draw on it with India ink. It can be done more quickly than a burin, lithography, and a scribe; then one prints by means of our recent discovery."

Joaquim Correia de Mello, a botanist and druggist, had informed Florence of the properties of silver nitrate, thus giving him the chemical means of recording an image. Florence later experimented with other light-sensitive substances, including submuriate of mercury, phosphorus, prussic acid, oxalic acid, oxilate of mercury, silver oxilate, silver chlorate, silver bromide, and muriate of silver. In his diaries, he describes their properties and effects when exposed to light.

In an entry dated April 8, 1833, Florence explained how he mixed nitric and muriatic acids, added a small quantity of gold powder, moistened one side of a sheet of stationery, and produced a sensitive emulsion. Placed in sunlight, with part of the paper covered by an opaque object, the surface reached by the light turned dark. By wetting the paper in urine for 15 minutes, wiping the surface with a cloth, and re-exposing for several hours, Florence ob-

tained a satisfactory result, for the white area did not darken.

On February 21, 1839, full details of the experiments of William H. F. Talbot were announced at the Royal Society, London. Five years previously, he had spread silver nitrate on a sheet of paper, and set it in the sunshine after placing an object on it. The light blackened the exposed parts of the paper, leaving the remainder white. The procedure—contact printing—was identical to that used by Thomas Wedgwood in 1802, but the latter had been unable to fix the image. William Talbot discovered a way of not only recording an image in the camera obscura, but also of making the image permanent.

In Paris, August 17, 1839, announcement was made of the daguerreotype process. The news arrived in Brazil several months later. On October 6, 1839, *Phenix*, a São Paulo newspaper, printed a letter from Florence in which, after describing his accomplishments in polygraphy, he wrote:

"Another of my discoveries also known in this town, as well as by some people in Rio de Janeiro, is photography. The text sent to Paris carried two titles at the end: 'Discovery of photography or printing by sunlight' and 'Investigations into the capturing of images in a camera obscura by the effect of light.' A photographed drawing I had made was presented to the Prince de Joinville and put in his album by a person to whom I am indebted for this favor. I have just been informed that in Germany they have printed by light, and that in Paris they are doing very well at capturing images. As I have done very little with photography because of a shortage of more sophisticated conditions and for lack of a better knowledge of chemistry, I will not dispute the discoveries with anyone because two people can have the same idea, because I always found the conclusions I reached to be somewhat shaky, and to each his own; but I make this declaration with regard to polygraphy which has such beautiful properties so that its inventor may be known for all time."

(It was Felix Taunay, director of the Academy of Fine Arts in Rio de Janeiro, who placed a photo in the Prince de Joinville's album. When the prince—son of King Louis Philippe of France—visited Rio in 1837, he was given a photographic reproduction, made by Florence, of a drawing of a Bororo Indian.)

Jornal do Commercio reprinted Florence's letter December 29, 1839, with the following comment: "Readers may compare dates and decide for themselves whether the world owes the discovery of photography or at least polygraphy to Europe or to Brazil."

In the newspaper's February 10, 1840, issue, the subject was mentioned again, with the statement: "Today we have more data than we had at that time, so that we are able to settle the question in favor of Brazil. The reasons that led us to make this

decision are found in the following letter, which the author of the discovery has just sent us . . ."

Referring to his previous communication, Florence wrote: "I don't know if someone gathered from it that I was confusing polygraphy, a discovery that is entirely mine, with photography, to which I have no pretensions after learning what has been happening in Europe along these lines. It is true that for many years I have made use of photography in drawing, and in 1834 I used it in the presence of Messrs. Riedel and Lunt who took some of my photographs with them. Up to August 1839, I never heard that the same or better experiments had been made in Europe. Perhaps it is not too bold for me to say that I, too, invented photography, a name which was not new to me when I saw it for the first time in the paper from Rio de Janeiro, but the truth is that I did not continue with my experiments, and for this reason I do not want to claim as my own a discovery that someone else may have a better right to."

Florence's involvement with photography was virtually unnoticed until 1900, when an article by Dr. Jose de Campos Novaes appeared in the *Paulista Museum*. The author noted that the documents of Florence's work were in the possession of his grandchildren, "who should give them the publicity they deserve. They have not claimed the invention publicly, since it coincided with an identical discovery by Daguerre and Niépce in France."

In 1870, Florence had recalled events that occurred—by his recollection—38 years before. In a document quoted in his biography, *Hercules Florence, Ensaio Historico-Literario* (1900), by Estevam L. Bourroul, he stated that he had used glass plates in a camera obscura. He remembered that he had made a negative of the local jail, a bust of Lafayette, and other subjects, and added that the druggist Joaquim Correa de Mello had helped him formulate the word *photographia* (Portuguese for "photography").

(According to his biographer, the jail photograph was kept in a book to preserve the image, which was still perfect 15 years after it was made. We do not know, however, when the picture was taken.)



POPULAR PHOTOGRAPHY



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