In his introduction to *Photography and the American Scene*, Robert Taft referred to photography as “the most universally practiced of all arts and crafts.” He was not reporting news. American photography had reached that status, although not overnight, well before he penned those words in 1937.

A child of the industrial revolution, photography needed a mass market if it was to thrive. It was, therefore, inherently democratic; but in its infancy photography’s burdensome technical procedures prevented its use by the general public. With the wet plate process, a photographer had to make the emulsion, coat the plates, and develop them at the time of exposure. The barrier was breached in 1879, with the introduction of the dry plate negative. The new plates came ready to use, offered faster exposures, and simplified darkroom procedures as well. Photography became a more versatile and friendly medium.

Six to twelve times more sensitive than wet plates, dry plates encouraged action photographs—snapshots, sports photography and the like, which in turn stimulated the introduction of simpler and smaller cameras designed to be hand held in lieu of a tripod. The new designs included “detective” types, which, through the use of disguise or concealment, enabled photographers to work unobtrusively.

Unexposed dry plates could be easily stored until needed. Development of exposed plates could wait until a more convenient time, or someone other than the image maker could process the plates. This led to the establishment of a photo-finishing industry, which helped foster the use of cameras to record family events and travels.

This separation of the manufacturing and processing chores from image creation functions allowed photographers to concentrate on dealing with their subjects. A photograph could now be made with little more than a loaded camera. The dry plate largely supplanted the wet plate by 1883. By 1888 the technology had advanced to the point where George Eastman could say that photography was “within the reach of every human being who desires to preserve a record of what he sees...”

Two Lancaster County residents, Lloyd Mifflin of Columbia and Horace Engle of Marietta, were among those who realized the potential of the dry plate process for their own personal interests. They were born and raised within a few miles of each other and made their images at about the same time, in the late 1880s. It is likely neither knew the other. They photographed similar subjects: the Susquehanna River, the rolling central Pennsylvania land-
Lloyd Mifflin was born in 1846 on the family estate in Columbia, a town on the east bank of the Susquehanna River. His family could count Pennsylvania Governor Thomas Mifflin as an ancestor. After being educated at home by his father and tutors, "he enjoyed, if not wealth, at least a comfortable landed estate." Free to indulge his own tastes and interests, he turned to paint and verse to celebrate his beloved Susquehanna River and the surrounding landscape. He studied under the Turner-influenced American landscape painter Thomas Moran, and later under Herman Herzog in Dusseldorf, Germany. He then toured Europe before returning to the family estate in Columbia, where he lived the rest of his life.
Figure 2: Unidentified group of women. Plate #55, MG-165 Lloyd Mifflin Collection.
Horace Engle, born in 1861 at Riverside, his father's orchards on the outskirts of Marietta, was a geologist, engineer, inventor, and industrial promoter. Engle left home in 1881 to enter college. During the next nine years he completed academic programs at the colleges at Millersville and Lehigh and at Johns Hopkins University in Baltimore, worked on inventions, and committed himself to Prohibition Party politics. In 1890 Thomas Edison hired Engle as an “experimenter” for his West Orange, New Jersey, laboratories. Engle left after a year to be on his own, moving to Roanoke, Virginia. There, for the next thirty years, he worked on various promotional schemes for which he eventually received a small income in retirement near West Chester, Pennsylvania.

We know the year of Engle's first serious involvement with camera use but almost nothing about Mifflin's start. We know that all surviving negatives of Mifflin's are dry plates, and that there are references to photography in his turn of the century letters. The dress and costumes in the images suggest the 1890s era as well. From these bits of information one might hazard a guess that Mifflin began to use a camera sometime after 1886. Mifflin seems to have had no great regard for his photographs. His biographers as well do not mention them. His active involvement in the final disposition of his other works and personal effects did not extend to his photographs. The glass negatives disappeared, until found by chance, years later, in a junkyard. When found, they were stacked, moldy and in poor condition, in flimsy hosiery boxes. They subsequently found their way to the Pennsylvania State Archives in 1994.\footnote{303}

The bulk of Mifflin's extant plates might serve as a file of landscape details, ranging from wide views to close-ups. There are also photographs of groups, of persons artfully arranged, and landscapes with anonymous figures, most often women. Letters refer to photographs of work in progress—painting and sculpture. Mifflin apparently had a good working knowledge of photography, and was aware of the limitations of the medium's monochrome renderings of the colors in paintings and in nature. He was also critical of what he considered its distortions of reality.

Horace Engle's photographs date from 1888 to the 1940s. They exist today only because unusual qualities in his detective camera images caught the fancy of a descendant who accidentally found them stored in a corn crib on a relative's farm. Ultimately this led to the uncovering of later photographs, a fair portion of his papers, and other details of his life. This collection is now housed also at the Pennsylvania State Archives, stored within a few feet of Mifflin's plates.\footnote{303} Horace Engle had some darkroom experience before enrolling at Millersville. Interviews, correspondence, and diary entries reveal that he conducted unspecified photographic experiments while there, and worked on designs for an exposure meter, and a wire-photo transmitting system, both exploiting the properties of selenium. Engle's camera work, how-
ever, became a serious avocation in 1888, with his acquisition of a Concealed Vest Camera.

This camera was variously known as the buttonhole camera, vest camera, button camera, and Gray/Stirn Concealed Vest Camera. Although its lens was of high quality, and produced circular shaped negatives, it was as simple to use as a box camera. Designed to be worn under a coat, the lens simulated a button as it peeked through a buttonhole. The base model lacked a view finder. An early review described the user as composing the picture by "turning one's heart toward the subject." Many experts, noting the tiny image size, and the lack of focusing and other controls, considered this camera a toy, and not a serious instrument. Engle used it as if it had no limitations. In addition to the real-life portraits he captured of people, unposed and unaware of any photographer, he used it for landscapes, construction sites, urban streets, architecture, etc. In the two years of its use his camera produced a prescient collection of images, foreshadowing the street photography and candid work seen decades later.

When Lloyd Mifflin discussed painting or verse, they were always placed within the context of "art." When photography was discussed, it was measured against "art"—and found wanting. A sampling of statements explaining his views on art help explain his attitude toward photography:

On Nature:
I often feel that nothing is properly arranged in nature except the clouds, and not always in their case. 6

On Photography and Painting:
The suppression of the non-essential—to make of the many things, one thing—to subdue each thing to its proper place so that no one thing is too prominent—these are some of the tasks that confront the artist,...There is the fact that when we look at, say the central object, all the surrounding objects appear vague, fade away, become ghostlike, mere phantoms....But people insist on detail out to the edge of the frame....The camera's eye is not the human eye nor does it see as we do. 7

On Nature and Painting:
So it happens that I, knowing a greater beauty possible than nature can give us, am always discontented by her works, copying nothing, and seeing in the loveliest scene only the possibility of my ideal of it. So that everything I see is only a hint to me of something better. Nature can only put me on the track. I find that nature impedes the spiritual in us. It is in my way, I don't want it, I will study it now, as I am doing, only long enough to know it, then I will trample it under my feet, and sitting in the
dusk in my studio create a something lovelier and truer with a harmonic music in it which next day I will paint for you.

Those who, like historian Paul Wallace, believed in Mifflin's "deep love of nature," might be startled by "I will trample it under my feet." His words, however, are not directed at nature, but at those who confuse nature and art. For Mifflin, art was a product of human perception, intelligence, and skill. In painting, these qualities in Mifflin created the image, not his brushes, canvas, and paint. He applied a different criterion to photography, which he judged as the performance of a mindless tool. Mifflin did not recognize the role of human perception and intelligence in photography; he saw no skill in the photographer's hands. He had spent years developing his skills in painting and poetry. In art, as in life, difficulties overcome were a source of pleasure and pride. Photography, which was easy, devalued training and tradition. Useful as a copy machine, the camera had no other function he could take seriously. Though on the surface Mifflin's images may have served mostly utilitarian needs, his imagination and visual training operated full time. Many of his images project a contemporary feeling, both in design and expression—more so, perhaps, than his paintings.

Horace Engle, unlike Lloyd Mifflin, accepted the camera for what it was, and mentally cataloged its peculiarities—always ready to turn a "fault" or incapacity to advantage. In Engle's photographic world, qualities were neither good nor bad, they were appropriate or not, depending on the needs of his composition. Intuition and alertness were of prime importance. The moments recorded were too short for applying rules. In fact, Engle's photography could lead one to discover unexpected designs and compositions, new ways of seeing. He sometimes persuaded photo-finishers to print his double-exposures, the partial solarizations, the blurred images of a deliberately moved camera—all of them mistakes by conventional standards. He experimented with screens, with supplementary lenses and filters. He was also interested in exotic printing processes, in giant enlargements. But withal, the images made in the course of his travels met the standards of good commerical photography. The photography style Engle first adopted in 1888-1889 would today be called photojournalistic, exploratory coverage rather than disconnected single shots. It was suited to the wide-ranging existence he led; and it remained characteristic of his camera use for the rest of his life.

Photography was an end to Engle, not a means to an end as for Mifflin. Engle's devotion to his photographic world was complete; Mifflin only entered this world long enough to serve his needs. The images presented here fall into three categories: people, places, and animals. Mifflin and Engle's photographic treatments of similar subjects are quite different indeed. In figure 1, *Marietta, Pennsylvania 1888*, note that in taking this image Engle is
almost too close to his unsuspecting subjects to raise a conventional camera to his eye. Instead, it is the Gray/Stirn's eye which is seeing—through a button-hole (near his heart?!) just below the lapel of his coat. The lens of the Concealed Vest Camera provided no exposure control—it had one opening, f:11. Also lacking was a focusing control—not even a scale. Like the lens in a simple box camera, it was set to provide reasonably sharp focus over a range of approximately eight to fifteen feet. This explains why the subjects in this close-up, about two and a half to four feet from the lens, are not as sharp as the siding behind them. Engle, ignoring conventional warnings against working too close to subjects, took many successful close-ups—which raises the possibility that he guess-focused by unscrewing the lens a few turns to get the increased lens-to film distance needed. In figure 2, Mifflin, photographing on a social occasion, would use glass plates in a 4x5 camera on a tripod. This freed Mifflin to arrange his subjects with great deliberation and care, after which he could return to his camera to take the role of director/photographer. These subjects are well aware they are having their picture taken, and dutifully sit still for the exposure.

Figure 3 illustrates Engle's reaction to the aftermath of the Marietta Flood, coincident with Johnstown's Great Flood of 1889. He was less interested in the river when it was at normal height, and more in its dramatic features present only briefly. Mifflin, however, in figure 4, is quite content with the Susquehanna's tranquil periods; it is drama enough for him. Though the plate is scratched and somewhat damaged, it still reveals his interests lie in patterns made by light on the rippling water, and the formations of bedrock, all to be captured and reproduced later in a painting. Figure 5 shows Engle's candid view of cows at the family farm in Marietta. Engle no doubt was pleased that he obtained a view of an animal which might be curious at a camera on a tripod, let alone stand still for its portrait. Figure 6 shows Mifflin's artistic study of the cows; one can easily imagine him wanting to transpose this scene to canvas.
Figure 5: Cows. Marietta, PA 1888 or 1889. Gray Sturm Plate #L-7E, MG-198 Horace M. Engle Collection.

Figure 6: Cows. Plate #58, MG-165, Lloyd Mifflin Collection.
Notes


4. The plates have been contact printed and are part of Manuscript Group 165, the Lloyd Mifflin Collection, Pennsylvania State Archives. Many of Mifflin's paintings are housed at the State Museum of Pennsylvania.


