

BOTH PHOTOS: AMERICAN EXPEDITIONARY FORCES PHOTOGRAPHS (SHSI-IOWA CITY)



Iowa's Contribution to Camouflage

by Roy R. Behrens



U.S. ARMY PHOTOGRAPH, NATIONAL ARCHIVES AND RECORD SERVICE



The main character in *Bluebeard*, a novel by Kurt Vonnegut, is a painter who served in the U.S. Army during World War II as commander of a camouflage unit. All the soldiers in this troop had been artists in civilian life because, as the book explains, "it was the theory of someone in the Army that we [artists] would be especially good at camouflage."

Vonnegut's novel is fiction, but its central idea is based on the fact that, during World Wars I and II, there really were units of camouflage specialists (or *camoufleurs*, as the French called them). And these units were largely made up of soldiers—among them a number of Iowans—who in civilian life had been artists of one kind or another, including painters, sculptors, printmakers, graphic designers, illustrators, architects, and stage designers. The first such unit was set up in 1915 by the French, but comparable units were later deployed by the British and Americans, and, to a lesser extent, by the Germans, Italians, and Russians.

The belief that visual artists are inherently well suited for camouflage can be traced to a pioneering book about natural camouflage, first published in 1909. Titled *Concealing Coloration in the Animal Kingdom: An Exposition of the Laws of Disguise Through Color and Pattern*, it was written not by a scientist but by a leading American painter, Abbott H. Thayer, who claimed that the subject should never be left to biologists, because it "belongs to the realm of pictorial art, and can be interpreted only by painters."

The wartime use of camouflage is hardly a modern invention. But its importance became magnified during World War I in response to the use of the airplane for aerial observation. By flying over a battle-

Military camouflage in World War I took many forms, drawing on painting, theatrical design, and sculpture. Clockwise, from top left: Brown burlap suspended over a French street camouflages a route for troops and supplies. A sniper's uniform is striped to blend in with tree branches. "Chateau Camouflage" at Camp Wadsworth shows talents of 102nd Engineers. A member of the American Camouflage Corps emerges from a concealed foxhole, as others look on.

field, aviators could locate the troops and artillery of the enemy, then relay those positions to their own forces. In 1914, Lucien-Victor Guirand de Scevola, a French artist who was serving in the infantry, began to paint abstract, irregular shapes on the surfaces of cannon, which were manned by gunners dressed in loose-fitting hooded outfits that had also been painted. In de Scevola's field experiments, when an aviator flew over the area at 300 meters with instructions to look for camouflaged artillery, neither the men nor the guns could be seen from that altitude.

As a consequence, in February 1915, just seven months after the start of the war, the French government established the first *section de camouflage* in military history. The artist de Scevola was chosen to command the French unit, which began with only six men and grew, phenomenally, to a total of 3,000 men and women by 1917. The practice was quickly adopted by other countries, with the result that hundreds of artists were used during both world wars, by participants on all sides of the conflicts, as military or civil defense camouflage experts. These artists included such prominent painters as Thomas Hart Benton, Jacques Villon, Franz Marc, Arshile Gorky, Charles Burchfield, and Ellsworth Kelly; graphic designer Laszlo Moholy-Nagy; theater designers Jo Mielziner and Oskar Schlemmer; fashion designer Bill Blass; and animation artists at the Walt Disney Studio.

Among the Americans who served as military *camoufleurs* during World War I were three Iowa-born artists: Sherry Edmundson Fry (1879-1966), who cofounded the American Camouflage Corps, designed field camouflage in France, and is otherwise known as the sculptor of the statue of Chief Mahaska in the Oskaloosa town square; the celebrated painter

AMERICAN EXPEDITIONARY FORCES PHOTOGRAPHS (SHSHOWA CITY)



Grant Wood (1892-1942), who was assigned to artillery camouflage while stationed at an army camp in Washington, D.C.; and a painter and designer named Everett Longley Warner (1877-1963), who served as a leading authority on ship camouflage for the U.S. Navy.

PHOTOGRAPHS OF ARTISTS, COLLECTION ONE, ARCHIVES OF AMERICAN ART, SMITHSONIAN INSTITUTION

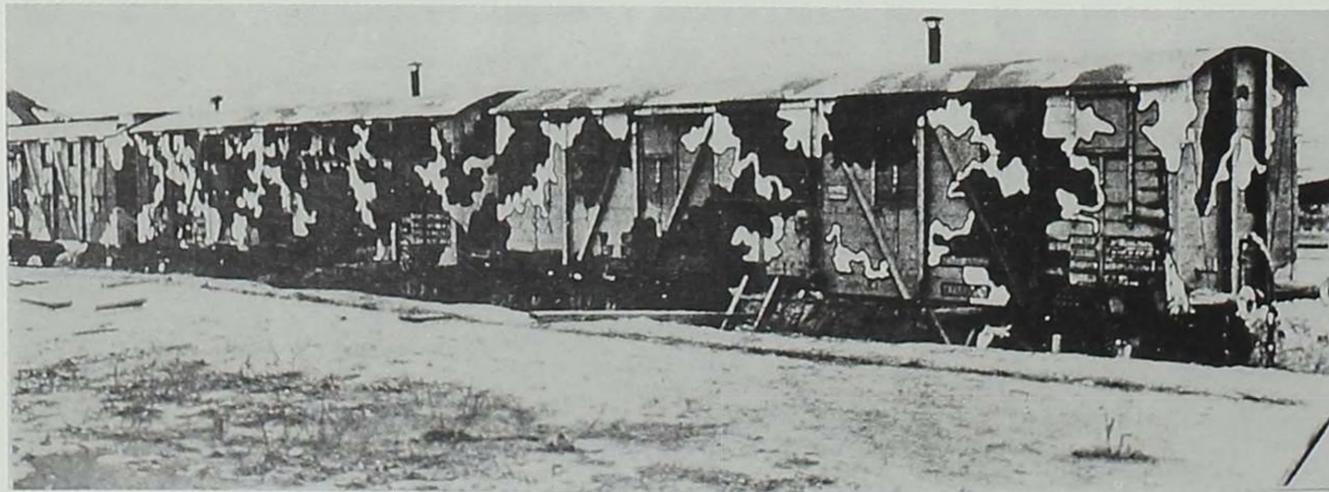


During World War I, Sherry Fry (left) was one of the first American artists to volunteer as a camouflage expert. Born in Creston on September 29, 1879, he left Iowa to study at the school of the Art Institute of Chicago; at the Académie Julian and the Ecole des Beaux Arts in Paris; and later with Frederick McMonnies, who was a student of Augustus Saint-Gaudens, the most famous American sculptor of the 19th century. Fry's abilities were extraordinary, and,

early in his career, he won several prestigious prizes, which led to his being commissioned to make a pediment for the Frick Museum in New York City, reliefs for the Grant Memorial in Washington, D.C., and the fountains at St. George on Staten Island.

In 1907, while living in Paris, Fry was asked to create a bronze statue of Mahaska, the 19th-century leader of the Ioway nation of Native Americans. Returning to his home state, Fry visited the Mesquakie settlement at Tama to make drawings of Native

COURTESY OF THE AUTHOR



Abstract, irregular patterns camouflage French railroad cars. This may have been the news photograph that Iowan Sherry Fry showed to Barry Faulkner in 1917.

Americans there, which he used as the basis for building a clay scale model of a heroic standing figure. Back in Paris, the final full-sized bronze was cast, exhibited briefly at the Louvre, and then shipped to Iowa, where it stands in the park in the center of town in Oskaloosa.

Prior to 1917 and America's official entry into the war, Sherry Fry had moved back from Europe and was living in New York. That year, he approached a friend and fellow artist named Barry Faulkner, who had studied with Saint-Gaudens, and was a cousin and former student of none other than Abbott Thayer, who had argued that artists were naturally good at interpreting camouflage. When Fry approached Faulkner, he showed him a photograph of railway cars that French camoufleurs—following the example of de Scevola's cannon—had disrupted with abstract, irregular shapes. Since the United States had by now declared war, Fry and Faulkner reasoned, perhaps its own artists should volunteer as camouflage experts.

Soon after, the U.S. established its Camouflage Corps. Its commanding officer was Lieutenant Homer Saint-Gaudens, son of the famous sculptor, and Fry and Faulkner were among its first members. Housed initially on the campus of George Washington University, its soldiers did calisthenics and marched in the morning, then hiked and invented deception techniques in the afternoon. For publicity, they concealed their own barracks, and, under Fry's direction, "painted cars and trucks in disruptive patterns; constructed papier mâché dummies of fallen tree trunks from whose interiors an unseen sniper could shoot," Faulkner recalled, "and dug trenches covered with sod and bushes from which soldiers could pop out and discomfit the enemy."

On New Year's Day 1918, the Camouflage Corps sailed for Europe. Arriving at the French harbor of Brest, Faulkner remembered: "We saw that camouflage had preceded us, for the harbor was full of boats, both French and American, painted in a riot of disruptive patterns." From there, they were sent on to Dijon, where they assisted the French in constructing a plant for the production of



This pair of official U.S. Army Expeditionary Forces photographs shows the trick a camoufleur hoped to play on the enemy. What appears to be a dead horse on the battlefield (left) is actually a plaster cast hiding a sharpshooter (right).



Photographed by the U.S. Signal Corps, this scene shows a demonstration of camouflage in which President Woodrow Wilson is told that a man is concealed within ten feet of him. Wilson is astonished when the rock in the foreground rolls away, revealing a man in a pit, who promptly salutes him. Iowan Sherry Fry's work also impressed the dignitaries; he had created a papier-mâché tree stump that hid a sniper in a pit.

Fearful of more German air raids, workers create camouflage in the Aisne district of France.

camouflage materiel. In addition to artillery cover (made of chicken wire into which cloth strips had been interwoven), the facility designed and manufactured paint-streaked, hooded sniper suits; periscopes disguised as tree branches; papier mâché listening posts in the form of hollow horse carcasses; armor-plated observation posts consisting of realistic replicas of dead trees (clandestinely traded with genuine trees during the night); deceptive foxhole covers; life-sized dummy soldiers and false heads (used to divert enemy fire); and miles of phony canvas roads suspended above ground, which blocked out the movement of soldiers below.

On February 2, 1918, Fry and Faulkner were transferred to the front lines, where Fry's specialty was concealing machine guns and trench mortars. Years later, Faulkner recalled that his Iowa friend "had little sense of fear and less of discipline"; that he "had an insatiable curiosity" and "resented taking orders." As a result, Fry defied regulations and frequently went out exploring alone in abandoned trenches, looking for German helmets, belt buckles, and other wartime souvenirs. Fry and Faulkner drifted apart, the latter remembered, as these foolhardy, dangerous forays became Fry's chief preoccupation. His superiors became concerned, and, before long, Fry was transferred away from the front, to Chantilly. There, because he spoke French fluently, he became the American liaison to the French camouflage section.



AMERICAN EXPEDITIONARY FORCES PHOTOGRAPHS (SHSI-IOWA CITY)



JOAN LIFFRING-ZUG COLLECTION (SHSI-IOWA CITY)

Like Fry, Iowan Grant Wood (left) studied at the school of the Art Institute of Chicago and, much later, at the Académie Julian in Paris. Born near Anamosa, Iowa, on February 13, 1891, Wood spent much of his early life in Cedar Rapids. After graduating from high school, he enrolled for two summers at the Minneapolis School of Design, Handicraft and Normal Art, where he worked with Ernest Batchelder, a



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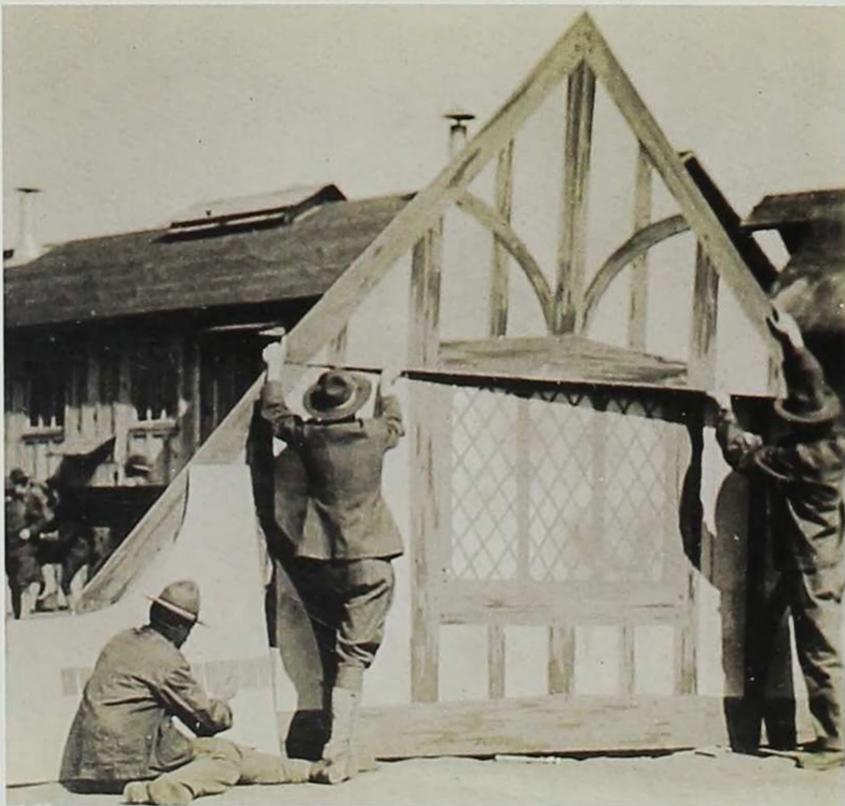


AMERICAN EXPEDITIONARY FORCES PHOTOGRAPHS (ISHIOWA CITY)





Allied camoufleurs painted this canvas to blend with surrounding greenery and conceal the actual road behind the screen.



Men of the 40th Engineers of the American University erect a false house, its painted side resembling theatrical scenery.

proponent of the British arts and crafts movement and author of a popular textbook about artistic composition, titled *The Principles of Design*. At age 22, Wood moved to Chicago, where he attended evening classes at the Art Institute and designed jewelry during the day.

When America declared war in 1917, Wood was excused from the draft because of flat feet. A few months later, he waived the exemption, volunteered for the army, and was assigned to Camp Dodge near Des Moines. There, presumably because of his artistic skills, he was spared the less palatable aspects of military life and given a sidecar motorcycle, in which he drove around the camp making drawings as a historical record, including pencil portraits of officers and enlisted colleagues. Wood's military experience was apparently pleasant and uneventful, until he became seriously ill, apparently from an attack of appendicitis.

After his medical recovery, Wood was transferred to Company B, Regiment 97 of the United States Engineers, in Washington, D.C., where he was assigned

to a camouflage unit. He was placed in charge of the paint storage tent, and, in the brief months before the war ended, he made clay models of concealed gun installations on miniature battlefields, and adapted camouflage patterns to artillery. After the war, he rarely mentioned his experience as a camoufleur, so it may have had little explicit effect on his mature artwork. On the other hand, if one looks closely at his finest paintings, his interest in pattern and rhythm is clear. In *American Gothic* and *Portrait of Nan*, for example, he makes overt, deliberate use of visual rhymes and broken symmetries—age-old composition tricks that, applied to camouflage, are devices that Thayer referred to as “laws of disguise.”

To conceal advancing troops on the Marne Front, men erect a screen, its visual line broken by random scraps of cloth.

The third camoufleur from Iowa was a painter named Everett Longley Warner (right), who was born in Vinton on July 6, 1877. He began his art training at the Art Students League in New York, and then, like his contemporaries, moved on to Europe to enroll at the Académie Julian. As a Navy Reserve lieutenant during World War I, he was in charge of a handful of artists who invented confusing, irregular schemes that were painted on

COURTESY OF CARNEGIE MELLON UNIVERSITY ARCHIVES

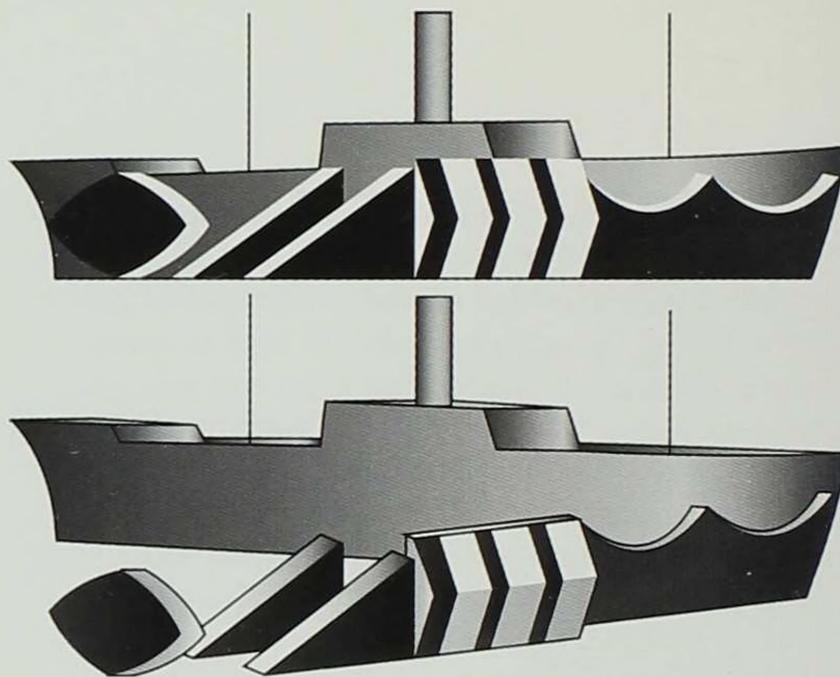


AMERICAN EXPEDITIONARY FORCES PHOTOGRAPHS (SHSI-IOWA CITY)

American ships. Warner's contributions to ship concealment were both innovative and significant, and he volunteered again as a camouflage expert during World War II.

The requirements of ship camouflage are different from those of ground camouflage. That became painfully evident in 1917, when German submarines sank an average of more than 23 British ships each week, for a total of 925. The worst week was in mid-April of that year, when 55 British ships, both merchant and military, were destroyed, an average of nearly eight ships per day. Faced with almost certain defeat, the Allies were frantically looking for ways to circumvent the u-boats' torpedoes.

A surprising solution to the submarine crisis was proposed by Norman Wilkinson, a British artist and lieutenant in the Royal Navy. In ship camouflage, explained Wilkinson, the object to be camouflaged is



Everett Warner's method of inventing dazzle camouflage schemes involved arranging colored wooden blocks at an oblique angle along the side of a ship model, then converting that arrangement to a flat painted pattern. (This illustration was redrawn by Ryan McAdam in 1997 from World War I-era U.S. Navy photographs.)

COURTESY OF THE AUTHOR



Four members of the American ship camouflage unit working under the direction of Iowan Everett Warner (not shown) apply dazzle patterns to miniature wooden ship models. Second from the right is the American painter Frederic Waugh.

U.S. NAVY DEPARTMENT PHOTOGRAPH, NATIONAL ARCHIVES AND RECORD SERVICE, C.1918

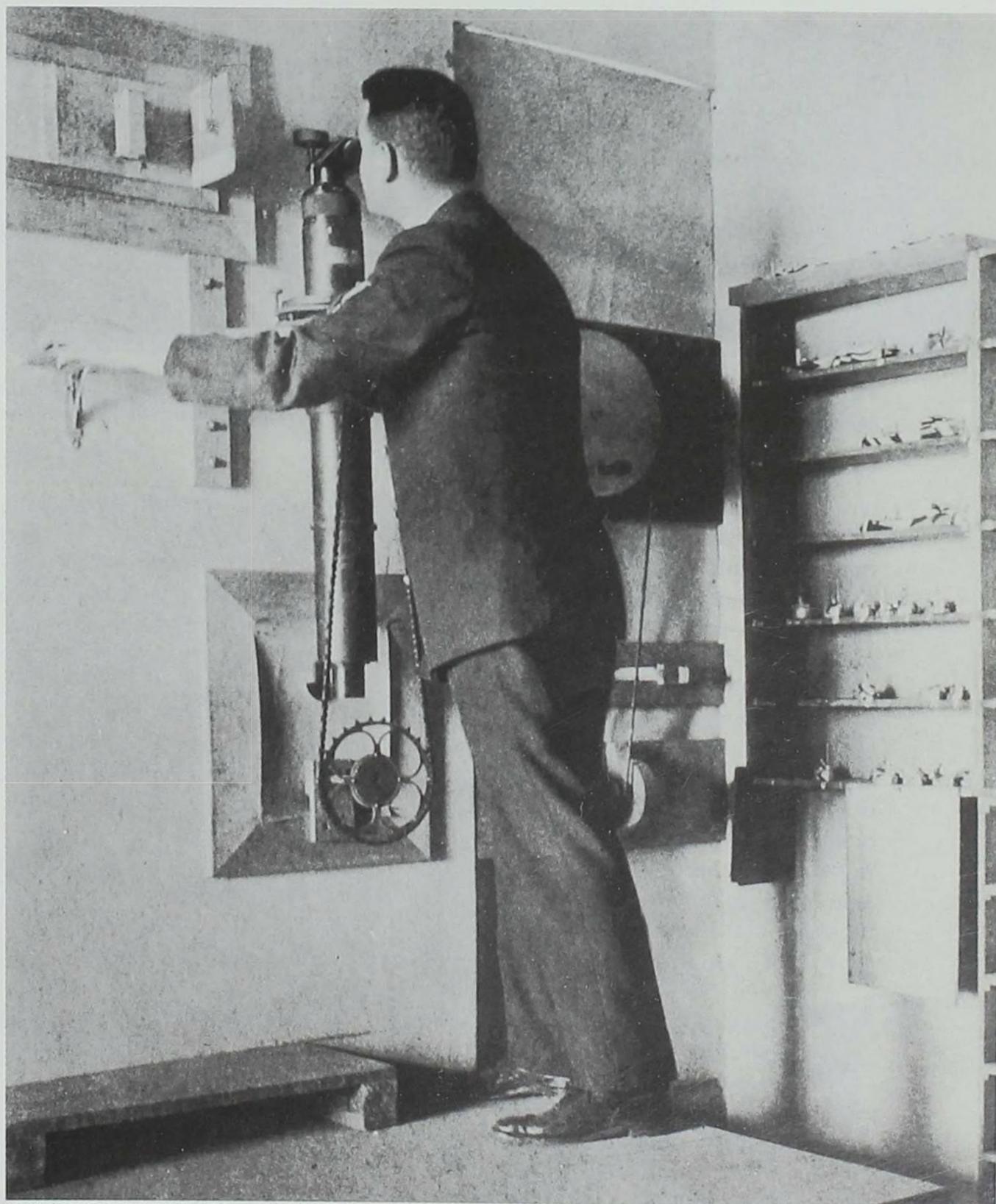
nearly always moving, and conditions around it are changing as well. Given these and other variables, it was absurd to attempt to conceal a ship on the ocean; if nothing else, the smoke from its smokestack would give it away. Rather, it would be more effective to paint abstract, irregular shapes on its sides (called "dazzle painting"), making it even more visible in the hope of diverting the submarine's aim. If the patterns were sufficiently confusing, the submarine gunner—aiming through a periscope, often in rough seas, from a distance of about a half mile—could never be sure of the course of the ship, its size, speed, or distance. To precisely determine the course and the speed was critical, because the torpedo was not aimed directly at the ship, but was fired ahead of it. It had to lead its target.

In October of 1917, the British Admiralty decided to apply dazzle camouflage to all armed and unarmed merchant ships, and by nine months later, more than 2,300 British ships had been camouflaged by Wilkinson's method. There were moments when as many as 100 ships were being dazzle painted at one time in a single harbor. The effect was resplendent—it was, said one journalist, "like being in the middle of a floating art museum."

Meanwhile, Wilkinson was loaned to the U.S. to assist in organizing an American ship camouflage section. Its research division, located at the Eastman Kodak Company in Rochester, New York, consisted of a team of scientists, while a design division in Washington, D.C., was composed of artists. The person in charge of the Washington branch was Iowan Everett Warner, who was also Wilkin-

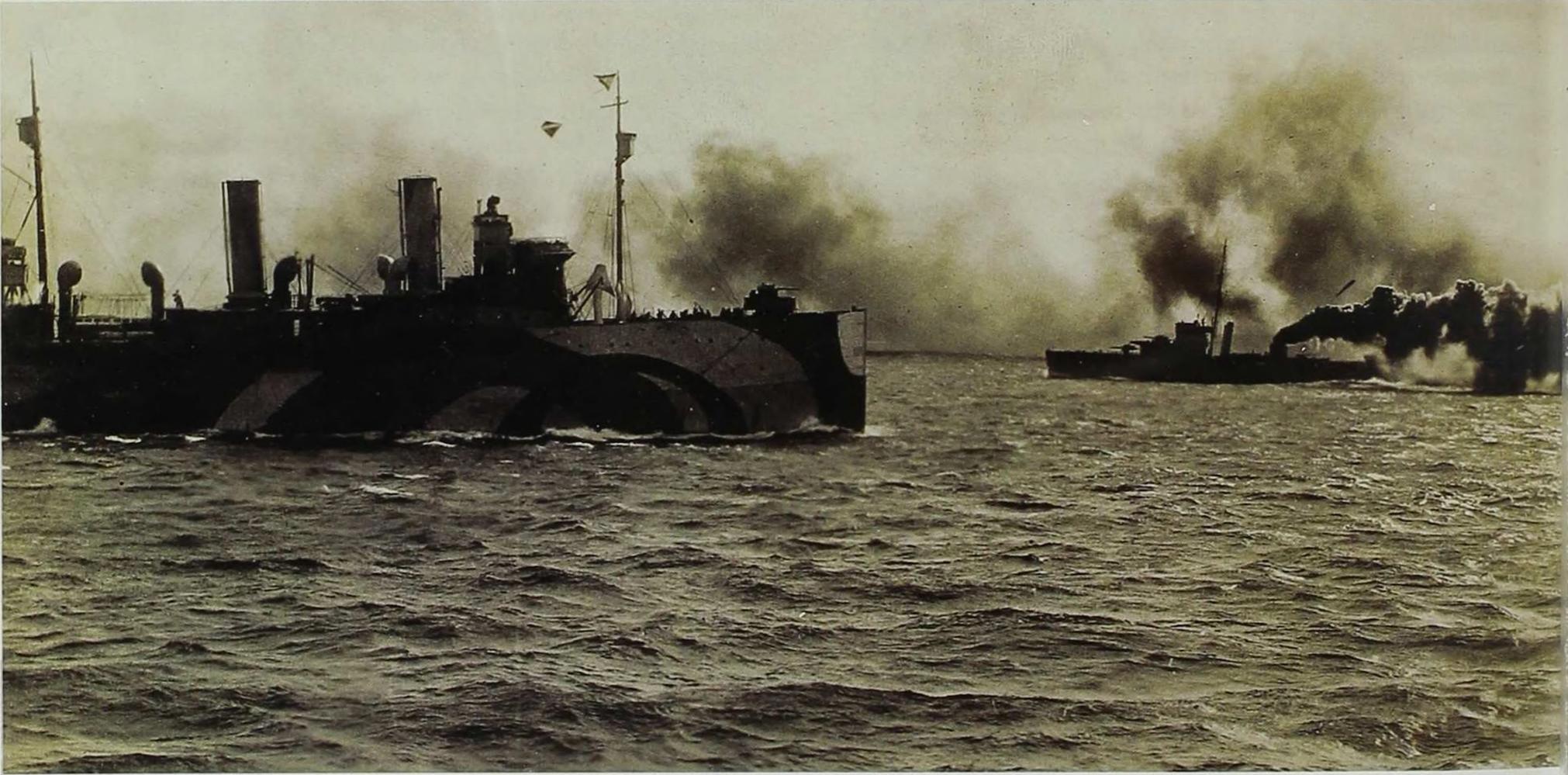
son's escort during his lecture tour at various American harbors about the purpose and application of dazzle painting.

Back in Washington, Warner assembled his team of camouflage artists, among them the marine painter Frederic Waugh, who produced an especially wonderful plan for dazzle painting the *Leviathan*, formerly the *Vaterland*, a large ocean liner captured from Germany by the U.S. and converted for use as a troopship. Like their British counterparts, the American camoufleurs applied dazzle patterns to miniature



The effectiveness of dazzle ship camouflage was determined by testing painted model ships in a periscope-equipped observation theater, shown here.

U.S. NAVY DEPARTMENT PHOTOGRAPH, NATIONAL ARCHIVES AND RECORD SERVICE, C. 1918



A splendid example of dazzle camouflage churns through the North Sea in September 1918. In this official U.S. Expeditionary Forces photograph, the H.M.S. *Vampire* circles the U.S.S. *Shawmut* with a smoke screen.

wooden models, tested the models in a periscope-equipped observation theater, and prepared instructions for painting the ships.

In the final eight months of World War I, more than 1,200 American ships were painted with dazzle patterns produced by Warner's team of artists. Many of these were variations on British designs, but hundreds of others were totally new, and some were quite different from Wilkinson's schemes. The difference was the result of an ingenious method, developed by Warner, in which new dazzle designs were created by arranging colored wooden blocks (often in reversed perspective) at an oblique angle against the side of a ship model, then converting that arrangement to a flat painted pattern.

Born only two years apart, both Sherry Fry and Everett Warner died in their mid-80s. Grant Wood was younger by more than a decade and died of cancer at age 50. Because of the unique circumstances of World War I, all three Iowa-born artists made contributions to military camouflage. Despite their shared mid-

western roots, their training at the Académie Julian in Paris, and the commonality of their profession, it is uncertain if they were acquainted, although Fry and Warner undoubtedly knew about the celebrity of Wood, who became an overnight sensation in 1930, when his painting *American Gothic* was shown at the Art Institute of Chicago.

By comparison with Wood, the fortunes of Fry and Warner were slight. Fry remained a sculptor throughout his long life, working out of his studio in Roxbury, Connecticut, but his artistic reputation faded after World War I, and his work is completely forgotten today. Meanwhile, Warner became a professor of art at the Carnegie Institute of Technology in 1924, where his division head was none other than Homer Saint-Gaudens, Fry's former commanding officer, who had led the American Camouflage Corps during World War I.

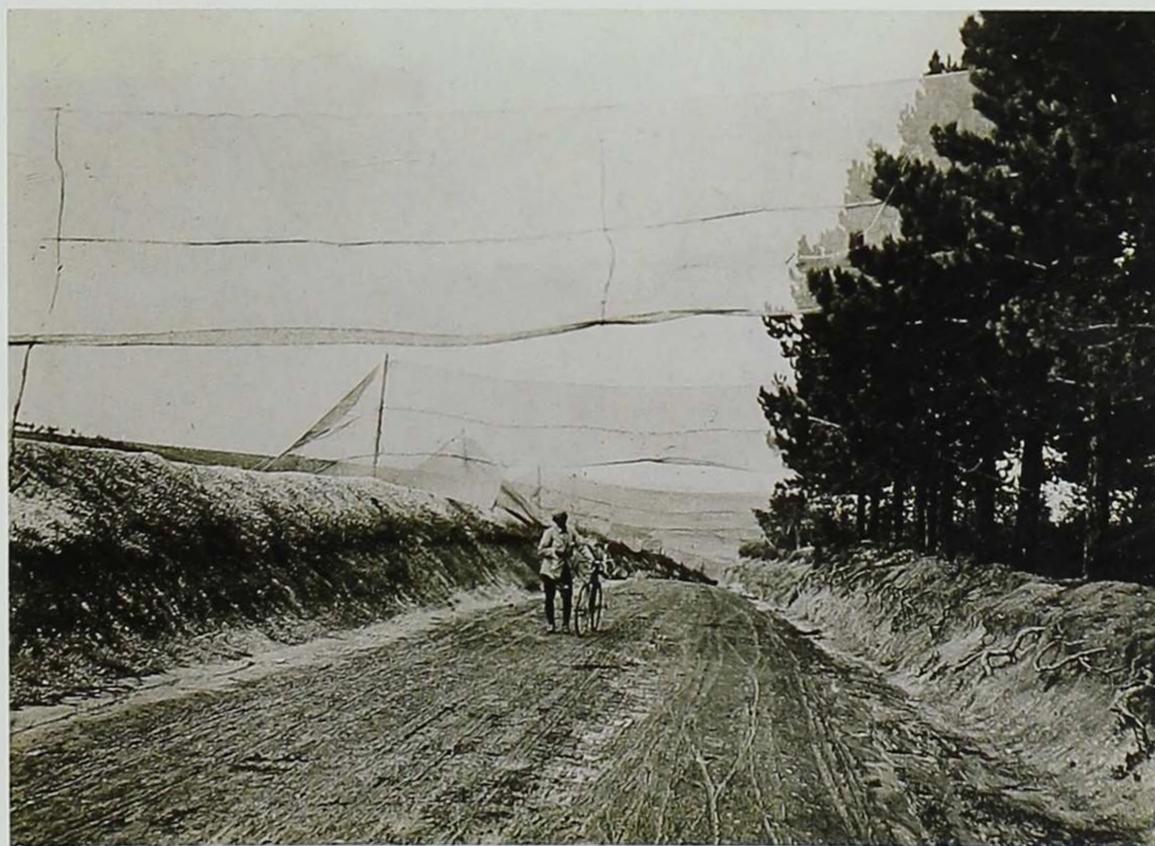
And what about Abbott Thayer's contention that art and camouflage are inherently related? In 1933, that idea was reiterated by Gertrude Stein, the American expatriate writer who created disruptive, irregular shapes with words. (Stein's closest friends, incidentally, included two other Iowans: William Cook, a

painter from Independence, who taught her to drive so she could volunteer as an ambulance driver during World War I, and *New York Times* music critic Carl Van Vechten, from Cedar Rapids, who became her literary executor.) In Stein's autobiography, there is an unforgettable passage in which she recalls her impressions when she drove out to look at the trenches at the end of the war: "Another thing that interested us enormously was how different the camouflage of the French looked from the camouflage of the Germans, and then once we came across some very very neat camouflage and it was American. The idea was the same but as after all it was different nationalities who did it the difference was inevitable. The color schemes were different, the designs were different, the way of placing them was different, it made plain the whole theory of art and its inevitability." ❖

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NOTE ON SOURCES

This research was partly supported by funding from the College of Humanities and Fine Arts and the Graduate College at the University of Northern Iowa. Regarding Sherry Fry, see Barry Faulkner, *Sketches from an Artist's Life* (Dublin, NH: William L. Bauhan, 1973); unpublished accounts by Faulkner at the Historical Society of Cheshire County in Keane, New Hampshire; and entry on Fry in Zenobia B. Ness and Louise Orwig, comps., *Iowa Artists of the First Hundred Years* (Des Moines: Wallace-Homestead, 1939), pp. 78-79. Grant Wood's military service is described in Darrell Garwood, *Artist in Iowa: A Life of Grant Wood* (New York: W.W. Norton, 1944). Everett Warner recalls his involvement with ship camouflage in "The Science of Marine Camouflage Design" in *Transactions of the Illuminating Engineering Society* (July 21, 1919, pp. 215-19) and "Fooling the Iron Fish: The Inside Story of Marine Camouflage" in *Everybody's Magazine* (Nov. 1919, pp. 102-9). Overviews of the historical link between art and camouflage include Roy R. Behrens, *Art and Camouflage: Concealment and Deception in Nature, Art and War* (Cedar Falls: North American Review and University of Northern Iowa, 1981), and "Camouflage" in Jane Turner, ed., *The Dictionary of Art* (London and New York: Grove Dictionaries, 1996); Guy Hartcup, *Camouflage: A History of Concealment and Deception in War* (New York: Charles Scribner's Sons, 1980); Elizabeth Louise Kahn, *The Neglected Majority: Les Camoufleurs, Art History, and World War I* (Lanham, MD: University Press of America, 1984); Tim Newark, et al., *Brassey's Book of Camouflage* (Herndon, VA: Brassey's Inc., 1996); and Seymour Reit, *Masquerade: The Amazing Camouflage Deceptions of World War II* (New York: Hawthorn, 1978). Complete annotations are held in *Iowa Heritage Illustrated* production files (State Historical Society of Iowa, Iowa City).



A lone bicyclist pauses on a truck route in eastern France. Above him, brown burlap draperies are loosely and irregularly stretched across the road, to simulate passing clouds and obscure the route from aerial observation by the enemy.



Alliance Neb
Feb 14 - 35

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Am writing you concerning
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person advise me to go there
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we so afflicted grasps at a straw
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he is a fake and I guess that's
exactly what I want to know.
Will you write me telling me
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