

MEDICAL MOVIES *on the* WEB ▶

The Reward of Courage (1921)

A rediscovered cancer film of the Silent Era

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U.S. DEPARTMENT OF HEALTH
& HUMAN SERVICES

The Reward of Courage (1921)

Produced by the Eastern Film Corporation

Prepared by the American Society for the Control of Cancer

2 film reels (2708 ft.), silent, black & white with tint, 35mm answer print.

NLM copy made from 35mm nitrate print in the collection of the Library of Congress on Oct. 26, 27, 2006.

NLM Unique ID: 101570969 (silent) & 101593096 (with music sound track)

It was in the fall of 1921 that the American Society for the Control of Cancer (ASCC) released its first public education film. *The Reward of Courage* sought to transform public ideas about cancer by encouraging people to seek help from a recognized physician at the first sign of the disease or its possibility: early detection and treatment being the ASCC's main approach to cancer control. The ASCC embedded this message in a melodrama that warned against a nefarious "quack," invited audiences to sympathize with a vulnerable woman endangered and a young couple thwarted in love, and told of the story of a hard-headed businessman converted to the idea that an industrial clinic could improve worker health and productivity, reduce company costs, and detect cancers.

The movie was the first of the many thousands of public education films about cancer produced since 1921. But until recently it was impossible to view. No copies seemed to have survived in any major film collection. Even the American Cancer Society — as the ASCC was renamed in 1944 — had not kept a copy. The movie was considered lost until 2006 when a print was discovered in a partially catalogued collection at the Library of Congress and preserved by the National Library of Medicine. A digitized copy of this print accompanies this essay. This article follows the life of the movie from its beginnings to its rediscovery. It explains why the film was made, how it sought to promote the ASCC's educational message, how it was received and distributed, why it was lost, and how it was rediscovered and preserved.

The Origins of *The Reward of Courage*

The Reward of Courage began life amid a growing sense of urgency among the founders of the ASCC that more (and more accurate) public education about cancer was needed. The disease, the organization noted, began as a local entity that later spread to affect other parts of the body. It was most easily treated when it was still in its local circumscribed condition, generally by surgically removing the tumor or a precursor, and sometimes by the use of x-rays or radium. The longer the tumor or a precancerous condition was left untreated, the more likely it was to grow and spread, and the more difficult and uncertain became the treatment. Eventually, the disease would spread so far, the ASCC claimed, that it would be impossible to treat successfully. Consequently, the cancer campaign urged people to seek treatment the moment the disease or its possibility was discovered, before it became "hopeless" or incurable.

The problem, the ASCC claimed, was that people often arrived in the doctor's office long after anything could be done for them. Part of the reason was that the disease often began insidiously. In its early stages, there was no pain, disablement, or disfigurement to drive patients to their physicians, and the disease only gave the subtlest of signs as to its presence. All too often people failed to notice these early warning signs, were unaware of their significance, or were paralyzed into inaction by fear of the disease or its treatments. The ASCC argued that, to complicate matters further, "quacks" and patent medicine vendors routinely tempted patients away from competent physicians, and too many physicians misinformed their patients about cancer, out of ignorance or incompetence. All these factors stymied ASCC efforts to combat the disease, since, it claimed, even the best treatments for cancer would fail unless patients got to a competent physician in time. As an ASCC pamphlet put it: "No matter how great his skill or how modern his knowledge the doctor cannot help a patient who does not come to him."¹ A key to changing this situation, the organization argued, was public education.

Table 1

Frank J. Osborne's Appointments 1911–1924

1911	Graduates from the University of Rochester with the B.S. degree
1911–1912	Trains in biology and public health at the Massachusetts Institute of Technology under William T. Sedgwick
1912–1913	Assistant Health Officer, Montclair, New Jersey, under Chester H. Wells.
1913–1916	Health Officer, Orange, New Jersey
1916–1917	Executive Secretary, the New York Social Hygiene Society;
1917	Field Secretary, the American Social Hygiene Association
1917–1919	First Lieutenant in the U.S. Army's Sanitary Corps, attached to the Section of Venereal Disease Control of the Surgeon General's Office and the Commission on Training Activities for extra cantonment duty at Camp Merritt and the Port of Embarkation, Hoboken
1919	Dual appointment: a) Field Representative, Interdepartmental Social Hygiene Board of the Federal Government. b) Special organizer of the New York State Department of Health
1919–1924	Executive Secretary, ASCC

Sources: "Appointment of a New Executive Secretary," *Campaign Notes. American Society for the Control of Cancer* 1, 19 (November 1919): [2]. "Health Coordination Committees," *Campaign Notes. American Society for the Control of Cancer* 1, 19 (November 1919): [2–3]. "Frank J. Osborne, East Orange," *State of New Jersey, Manual of the Legislature of New Jersey. One Hundred and Sixty-Eighth Session* (Trenton: State of New Jersey, 1944), 370–71.

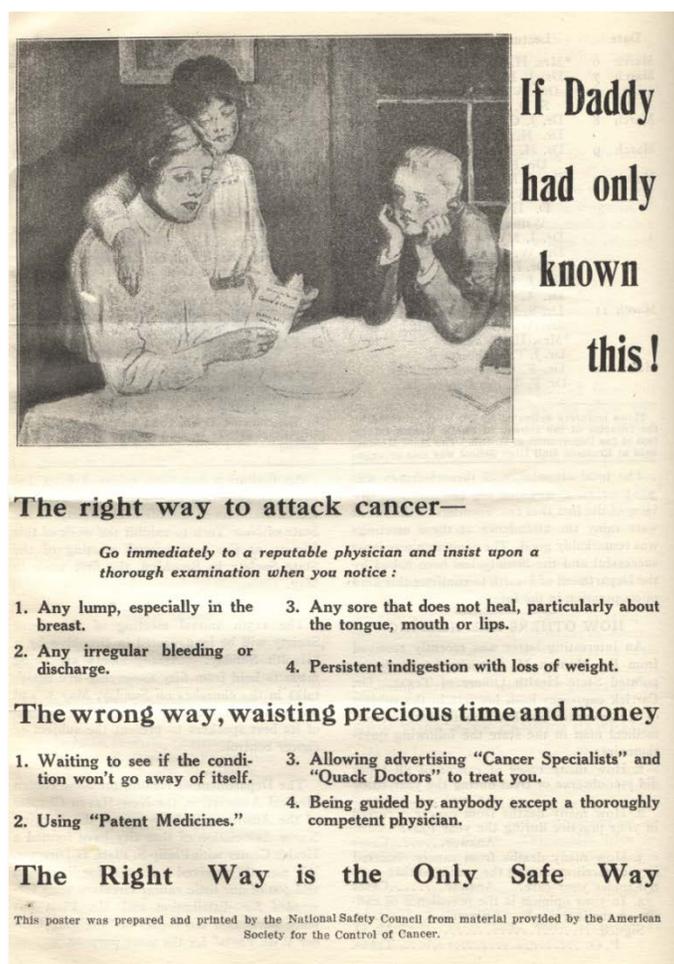
The organization began in a small way in 1913, but its public education efforts expanded substantially after the First World War, led by its dynamic new executive secretary, Frank J Osborne.² Appointed November 5, 1919, Osborne had come to the ASCC with a long background in organizing health education campaigns, especially against the venereal diseases (Table 1), and the cancer organization hoped to build on this experience.³ Not only did Osborne have extensive experience of the nuts and bolts of organizing such campaigns, he had also helped to create local health coordination committees in New York which, as the name suggests, sought to bring together public health activities within a

particular community. The ASCC hoped that the coordination committees' involvement in various activities — such as local health centers and educational campaigns to prevent diseases of adult life — might be used for the cancer campaign.⁴

The ASCC's public education efforts were in part inspired by what it saw as the success of the much wealthier National Association for the Study and Prevention of Tuberculosis (NASPT) founded in 1904 and renamed the National Tuberculosis Association (NTA) in 1918.⁵ Like the NASPT/NTA, the ASCC hoped to develop publicity and education programs to direct people to recognized physicians, steer them away from “quacks” and incompetent physicians, and encourage them to seek treatment as soon as the disease or a warning sign was identified.⁶ In the ASCC's view, the NASPT/NTA campaign had “resulted in a very great diminution in the number of deaths from this disease [tuberculosis], largely because people have been taught not to delay in consulting a physician,”⁷ and it hoped to emulate such success. As C-E.A. Winslow, Professor of Public Health at Yale University and a director of the ASCC, put it in 1920: “If it is sound economy to provide for the early diagnosis and sanatorium treatment of tuberculosis, it is just as sound to provide for the early diagnosis and surgical treatment of cancer.”⁸ Encouraging people not to delay seeking help from a competent physician was to be a central tenet of the anti-cancer campaign.

But the NASPT was not the only model for the ASCC. Osborne's appointment also highlights parallels between the ASCC's campaign and the social hygiene campaigns.⁹ Just as Osborne's public education efforts against venereal disease sought to dissuade people from turning to the “medical fakir and lying charlatan,”¹⁰ so the ASCC wanted to dissuade people from seeking quack cancer treatments. Just as Osborne worried that his anti-venereal disease efforts were undermined by public ignorance and confusion, and that reputable medical advice was constantly competing with a deluge of disreputable literature, so too did the ASCC in its efforts against cancer. Just as Osborne worried about “the past ‘conspiracy of silence’ and taboo”¹¹ around venereal disease, so the ASCC worried about the current silence and taboos around cancer. Just as Osborne worried that “many girls do not know they are infected until the disease has developed to such a point that they have infected many persons,”¹² so the ASCC worried that many people did not know they had cancer until it was too late to do anything about it. Both campaigns sought to direct people to reputable physicians and treatment centers, to mistrust the advice of friends, family and even at times their physicians, and both saw the establishment of free diagnostic and consultation clinics as key means of getting the public to seek help. Thus, Osborne was to face many familiar problems when he joined the ASCC.

Figure 1



A poster used during the 1921 Cancer Week, unusual for the time, since most other surviving cancer posters from the early 1920s used little visual imagery, beyond the use of particular fonts and layouts for the text. The poster in this case highlights the impact of male ignorance of cancer on family members, including children. Source: Campaign Notes. *American Society for the Control of Cancer* 3, 4 (April 1921): [4].

During his time with the social hygiene campaigns, Osborne had sought to develop a diverse range of educational and publicity strategies. "[I]t should be remembered," he wrote referring to anti-venereal disease campaigns,¹³ "that 'the public' in this country is a complex entity. Different races, tongues, customs, ideals, moral standards, hopes, and fears, are represented. All sorely need social hygiene instruction, but each effort must be planned to fit the peculiar characteristics among the people it is designed to reach." At first sight the ASCC might seem to have targeted a much narrower audience. Historians have argued that its main focus was white women, but this should not be read to suggest that it saw its public as homogenous or limited to women.¹⁴ Its educational campaigns in the late 1910s and early 1920s sought to target Jews and Christians (both Catholic and Protestant), rural and urban populations,

business owners and labor unions, cinema and theater goers, and members of fraternal orders and lodges. Women were targeted as mothers, daughters and wives, and men as fathers, sons and husbands; the latter's ignorance of cancer a danger not only to themselves, but also a tragedy for their families (Fig. 1). Special efforts were developed to target all these particular groups and many others within that "complex entity" that Osborne saw as the public. Some people were reached by lectures, sermons, and lanternslides, some in the doctor's office, the clinic, the church or temple, the motion picture theatre, women's club or fraternal order, and others through newspapers or magazines. There were myriad ways to reach the public, and to address the interests and concerns of particular groups and individuals within it.

Osborne himself argued that the cancer campaign was different from earlier ones against infectious diseases. As he pointed out, cancer was not preventable in the way that contagious diseases were.¹⁵ There was no point in avoiding exposure to an infectious agent — cancer was not contagious. Nor could it be prevented by any system of hygienic living, exercises, diet, or injections of serum or vaccines. Contrary to most contagious diseases, he noted, the beginnings of cancer did not involve plain signs: no terrific fever, loss of sleep, intense pain, or poor appetite. Instead it tended to begin slowly and without obvious warning. Its early signs were subtle and easily misinterpreted, and one of the tasks of an education program was to educate the public as to these "danger signs" and to encourage them to go to a physician the moment one of them was spotted. All these themes would be incorporated into ASCC public education campaigns, including *The Reward of Courage*.

National Cancer Week, 1921

The Reward of Courage was to be part of a broader effort to re-launch the ASCC after the war led by Osborne and the energetic President of the ASCC, Denver physician Charles A. Powers.¹⁶ (Fig. 2) Central to this effort was the creation in 1921 of the first National Cancer Week, held October 30 to November 5, 1921, and blessed by President Warren G. Harding.¹⁷ This was an intensive week of public education events, much of which would have been familiar to organizers and audiences of campaigns against tuberculosis and the venereal diseases¹⁸ — lectures for physicians, nurses, and the general public (the Society provided lecture outlines for the last of these);¹⁹ free diagnostic clinics;²⁰ the distribution of thousands of educational pamphlets and posters;²¹ the publication of numerous articles in newspapers and other periodicals;²² theater slides;²³ an exhibit;²⁴ an educational lecture by radio (apparently the first time that radio had been used for public health education);²⁵ a telephone S.O.S. system to alert people to upcoming events;²⁶ and airplanes that delivered speakers to their destinations.²⁷ The Cancer Society — and Powers in particular — were enthusiasts for new communication technologies like radio, telephone, airplanes, and movies. However, movies got special attention. Of all these new technological marvels, *The Reward of Courage* was to be a centerpiece of the 1921 campaign.

Figure 2



Studio portrait of Charles A. Powers, created 1886–1901 by the studio Rose & Hopkins. Source: Denver Public Library’s Western History and Genealogy Digital Collections. Reproduced with permission.

In commissioning *The Reward of Courage*, the ASCC built upon a growing enthusiasm for film as a tool of public health education.²⁸ For many physicians and public health officials, the motion picture had the unique ability to encourage personal and social transformation. It could present vast amounts of information, much more than the printed word and still images. It could take people places and show them things that a physical demonstration or lecture could not. And, the ability of moving images to evoke emotion, entertain, and educate seemed to be unrivalled by other media, at least according to advocates of motion pictures. There were some who questioned such claims, but from the 1910s on, a large number of films were released on topics such as alcoholism, water and food contamination, tuberculosis, and venereal disease. Some were made by physicians themselves, others by commercial film companies (anxious, in part, to counter the reputation of motion pictures as corruptors of public morals), and others by state and city governments, health charities and advocacy organizations, and, especially during the First World War, by the federal government.

The ASCC echoed this excitement about film, but also approached the technology with caution. *The Reward of Courage* was to be the first ever public education film about cancer, but the ASCC (despite Osborne’s and Powers’

enthusiasm for motion pictures) did not regard it as a simple solution to its educational goals. Like other health organizations, it believed that movies had an exceptional ability to instruct, but it also suggested that this exceptionality was brought out best when film was used in concert with other, more traditional, educational media such as pamphlets, posters, slides, newspapers, and lectures. With this in mind, Osborne wrote a scenario for the film, and asked a former colleague at the American Social Hygiene Association for advice on production. The colleague was the Association's director of exhibits, H.E. Kleinschmidt, a prominent advocate of film in health education.²⁹

Figure 3



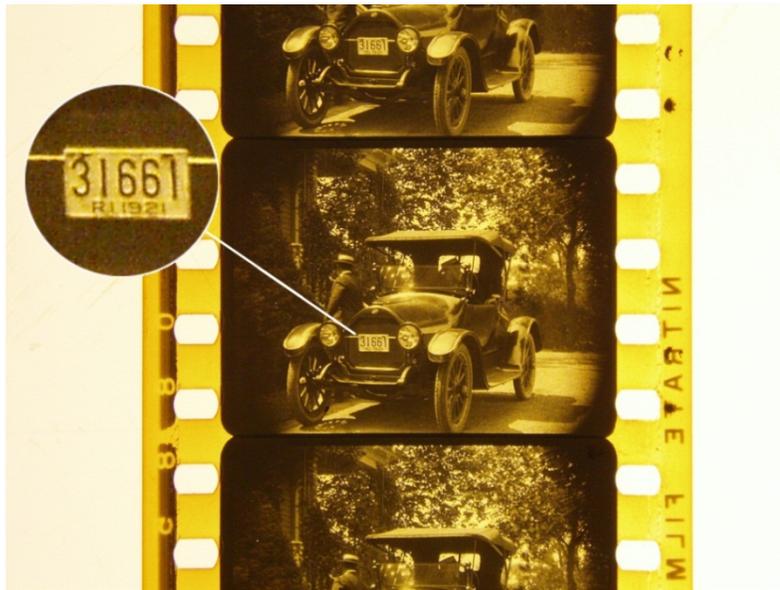
Frank A. Tichenor and his son Frank A. Tichenor Jr. Undated photograph, probably from late 1910s/early 1920s. Source: Tichenor scrapbook, author's collection.³⁰ Reproduced with permission of David Cantor.

Kleinschmidt persuaded Osborne that the ASCC did not have the ability to make the film in-house, so he turned to a commercial film entrepreneur called Frank A. Tichenor for help.³¹ (Fig. 3) Tichenor was the head of the Eastern Film Corporation, which had been founded in 1915 in Rhode Island as a film production and distribution company that Tichenor hoped would rival some of the largest entertainment studios then in existence. But things did not work out as Tichenor wanted, and Eastern largely abandoned entertainment films in favor of producing and distributing educational, training and industrial films, and movies for political and advertising campaigns. Whereas in 1915 Tichenor had

been at the center of the entertainment film world, hobnobbing with film stars and directors, by the 1920s his business contacts were very different.³²

Much of his new work involved cultivating sponsors for the new types of films Eastern was to produce, and persuading them that film could be a part of their educational, training, or publicity efforts. But, it was often an uphill task selling films to sponsors. Films were expensive to produce and for customers to buy, and potential clients were not always convinced of the value of film over more traditional, and often cheaper, means of education—newspaper articles, lectures, lantern slides, and so on. *The Reward of Courage* was one of Tichenor's first major commissions, and an important one since it came with quite a bit of money. The ASCC had gotten \$8,000 from the Rockefeller Foundation to make two movies—one targeted at the medical profession, and one targeted at the public.³³ It is unclear whether the medical movie was ever made, but the public education movie went ahead, and became *The Reward of Courage*.³⁴

Figure 4



The Reward of Courage was set in Pleasantville, Pennsylvania, but someone forgot to check all the props. The automobiles have Rhode Island plates (“R.I.”), the state where the film was made. Note the reverse text at the edge of the film. This image comes from the original nitrate print. This and figures 5–9 were produced by the Library of Congress.

The timing was opportune for Tichenor. With the withdrawal of the federal government from public health film production after World War I, numerous new companies began to enter the field, and Eastern found itself struggling to differentiate itself from the competition. The ASCC commission provided a way to do this. Eastern sought to portray itself as a producer and distributor of high quality films³⁵—by implication in contrast to the many other companies that (from Eastern’s perspective) produced films of lesser quality and of dubious educational value. The ASCC commission came with a sizeable budget that

allowed Eastern to consider making a film that would allow it to distinguish its output from the many lesser films it believed were flooding the market. The company took Osborne's script, added some human interest in the form of a love story, and began production.³⁶

Filming took place over the summer of 1921 at Eastern's studios in Providence and in various other locations around Rhode Island, and the film was released just before National Cancer Week, sometime in late October 1921.³⁷ Most of the location shots cannot be identified, except that they are all in Rhode Island or nearby. Nor are the actors known. In general, Eastern tended to rely on actors from local Rhode Island theatres or touring companies, but occasionally it would bring them in from New York.

Figure 5



Miss Keene, the nurse at Dr. Dale's clinic, examines Anna Flint. This is probably the first cinematic representation of a breast examination for cancer in a public health movie.

The stories in the film

The film is a melodrama set in the fictional town of Pleasantville, Pennsylvania, (but see Figure 4) and is made up of several interwoven stories — a love story, a story of a woman endangered, a story of a sleazy quack, and a story of a hard-headed businessman converted to a progressivist belief in the value of medicine to industry.³⁸ Perhaps the most surprising to a modern audience is the inclusion of what one commentator later called “a beautiful home love story.”³⁹ This is the tale of Eugene (Gene) Barnes and Dorothy Flint. Gene and Dorothy are due to marry, but Dorothy is also being wooed by Morris Maxwell, whom her mother, Anna, prefers as a future son-in-law. Dorothy is not interested in Morris, and brushes him off when they first meet, to Maxwell's discomfort. But a more serious threat to Dorothy and Gene's future emerges when Anna discovers a lump in her breast and turns for help to Miss Keene, an old friend of Dorothy's and a nurse. In what is probably the first representation of a breast

examination for cancer in a public health movie (Fig. 5), Miss Keene confirms Anna’s suspicions, and Dorothy calls off her engagement with Gene, as the intertitle puts it, sacrificing “her own happiness through the mistaken idea that the disease was hereditary.” Their marriage is only saved when the surgeon Dr. Clinton (whom we never see on screen) persuades her that cancer is not hereditary. (Fig. 6) Surgery offered hope for those with a broken heart as well as for those with cancer.

Figure 6



The love story: 1) The lovers separate (in blue). 2) The lovers are reunited (in amber). 3) The happy outcome of their union (in pink). 4) And all because of Dr. Clinton.

Figure 7



A) Morris Maxwell, Dorothy’s sleazy suitor, on the porch of the Flint’s house. B) Radiumized Paste, his fraudulent cancer cure.

The love story served to reinforce a broader ASCC educational message about the hereditary nature of cancer. Pamphlets circulated by the cancer society during the 1921 Cancer Week noted that cancer was not inherited, and that it was not even certain that a tendency or predisposition to the disease was inherited.⁴⁰ The real danger, according to the ASCC, was that the *public belief*

that cancer was a hereditary disease encouraged those “infected with this disease desire to conceal it,”⁴¹ perhaps out of shame. The result was twofold. Not only did this belief generate “**much needless worry** about inheriting the disease,”⁴² it also encouraged people to delay going to their physicians until it was too late to treat them successfully. The love story was thus a warning against what the ASCC regarded as mistaken and dangerous beliefs about cancer — dangerous both to patients, and to the success of the anti-cancer campaigns.

The love story is also interwoven with the story of a vulnerable woman endangered—this is the story of Dorothy’s mother, Anna, and her discovery that she has breast cancer. The danger, however, comes not only from her cancer, but also from the figure of Morris Maxwell. Maxwell, it turns out, is not only a sleazy rival to Gene as suitor to Dorothy, but also little more than a fraudulent healer. (Fig. 7) Maxwell claims to be associated with a philanthropic group of scientists who offer a cancer treatment called Radiumized Paste, sold with the label — “NO KNIFE, NO PAIN, No Failure Recorded.” The label gives the clue that Morris is not what he claims to be, for the Cancer Society asserted that no paste or salve ever cured cancer, and that those who offered such cures were not to be trusted, especially those who, like Maxwell, offered a cure based on a secret remedy. Secret remedies were another sign of untrustworthiness, and those who substituted secret remedies for surgery were especially to be damned — the “knife” in the label above referred to surgery.

Figure 8



Hidden behind a curtain, Morris Maxwell overhears a conversation about Anna’s cancer diagnosis before offering Anna a painless “cure” for the disease for \$200.00 — his Radiumized Paste.

Morris is perhaps the strongest character in this movie, and the filmmakers and the actor seem to have had a lot of fun trying to present him as sly and conniving. He is a stage villain, who listens secretly behind a curtain (Fig. 8), and takes advantage of what he overhears to exploit Anna’s vulnerability — she has

just heard that she needs an immediate operation, and Maxwell, hoping for a financial return, is quick to reassure her that she doesn't need it. An intertitle describes him as "apparently a gentleman of leisure," a choice of phrase that establishes Maxwell as a very different sort of character to the other men in the movie — Gene, Marshall Flint (Anna's husband, and the owner of the Pleasantville Accessories Supply Company)⁴³, and Dr. Dale (a physician in the company's clinic). Compare Maxwell's aristocratic clothing — the jacket tails for example — with the plainer clothes of Gene and Dale (who also wears a white coat), and even Marshall's attire of a successful businessman, better cut than Gene's and Dale's.

Also, look at the way Maxwell uses his cigarettes. A modern audience might see this hinting at lung cancer, but this was probably not the concern at the time. Gene and Marshall also smoke, but they do not smoke with the same style as Maxwell. Watch how the actor playing Morris uses the cigarette in the porch scene before he meets Dorothy to signify Morris's complacency and self-satisfaction; note his extravagant cigarette holder in the living room or parlor scene with Marshall, Anna, and Dorothy, signifying Morris's affected, if not effete nature (by contrast, Marshall the vigorous businessman smokes a more manly cigar); or how he discards a lighted cigarette when approaching the Flint's house later in the movie, to signify Morris's contempt for the Flints. Where Marshall, Gene, and Dale all value productive work, Maxwell enacts Thorstein Veblen's characterization of a gentleman of leisure. He is someone who apparently has the pecuniary ability to live a life of idleness, free from the need to make money. Audiences might also expect him to live such a life from a sense of productive work as unworthy.⁴⁴

Note also the word "apparently" — as in "apparently a gentleman of leisure." Maxwell is in fact not a gentleman of leisure, but someone who seeks to give a convincing impression of such a lifestyle. Thus, while he tries to suggest that he does not have to work, in fact, like Marshall and Gene, he does have to work to make a living. However, his work is not like that of Maxwell, Gene, or Dale. Where the latter three undertake productive work that benefits both themselves and others, Maxwell's work is only for his own benefit and is actually harmful to others. The movie makes clear that the consequences for Anna will be disastrous if she remains under his sway. Maxwell is a counterfeit, just like his medicine, and his style of clothing and mannerisms while aping those of the rich are also affectations that point a finger of suspicion at him. Even his one redeeming grace—his apparent involvement with a group of philanthropic scientific men—is little more than a sham.

Also interwoven in this film is a progressivist tale of a hard-headed businessman converted to the idea that an industrial clinic could improve worker health and productivity, increase company profits, and detect cancers.⁴⁵ The movie opens with Gene reporting to Marshall that a newly installed company clinic has paid for itself by preventing time lost on account of sickness, and has saved the workers money as well. Marshall is impressed, converted by Gene's statistics to accept the business case for a clinic he had previously ignored. The clinic is one of the few film locations that can be identified: It is the industrial clinic of the

Jencks Spinning Company of Pawtucket, Rhode Island.⁴⁶ In the movie, the clinic is supposed to promote better productivity, reduce the loss of worker's hours due to sickness, and serve as a demonstration of the value to industrialists of providing preventive health services, something that will also improve worker/owner relations — a progressivist message about the value of science and medicine to social and industrial reform. It is something of an irony that the Jencks Spinning Company was in several major disputes with its workers in the early 1920s, shortly after the movie was released.⁴⁷

In the film, Dr. Dale grumbles that Marshall shows no interest in his work, unaware that Marshall, newly enthused about the clinic's business potential, has come with Gene to visit and overhears his comment. Despite the embarrassment, Marshall and Gene listen as Dale explains the rationale of his operation: "Regular physical examinations and hygienic instruction are the secrets. We discover the ailments before they become serious." It will be recalled that Osborne noted that hygienic instruction was not useful in anti-cancer campaigns, but the ASCC did recommend regular physical examinations as a means of detecting cancers.⁴⁸ The clinic is not a specialist cancer clinic, but an industrial clinic that is also equipped to identify the possibility of cancer, and so provides an opportunity to route patients to a competent physician.

The point is revealed by the case of "Simpkins," a worker at the factory whom Dale has diagnosed with cancer. Simpkins' case provides the filmmakers with an opportunity not only to demonstrate the value of the clinic in cancer prevention, but also to reinforce the point about the dangers of mistaken popular beliefs about the disease and quackery. First, Flint demonstrates the mistaken belief that cancer is an infectious disease when he asks how Simpkins "caught" the disease. The key word here is "caught", for Dale explains that cancer is not contagious (it cannot be caught, a point noted by Osborne above, and echoed in the ASCC pamphlets that were circulated with the film⁴⁹), but that early treatment can lead to a cure. "And so in Simpkin's [*sic*] case, where the growth is still restricted, he may yet be cured by immediate and expert treatment."

Second, Simpkins anticipates the problems that Anna will later face in that he too has been tricked by Maxwell. Miss Keene enters and informs Marshall, Dale, and Gene that she has just come from Simpkins' home, and that the "husband refuses to follow the advice of the hospital doctors and says he can cure the cancer with a paste" — the Radiumized Paste that we later find out is produced by Maxwell. In a dramatic scene later in the movie, Marshall, Dale, Gene, and a postal inspector rush to Marshall's house and rescue Anna who has just handed over a check for \$200 to Maxwell.⁵⁰ Maxwell is arrested by the postal inspector (the Post Office Department could prosecute individuals and businesses that used its services to promote schemes defined as fraudulent),⁵¹ and Anna is saved by Dr. Clinton who (off-screen) cuts out the cancer and cures her of the disease.⁵² We learn nothing about the fate of Simpkins, who never appears onscreen. But the implication is that just as Anna has been saved by the action of her husband and physicians, so Simpkins or workers like him could also be rescued by the action of their employers and physicians.⁵³

This paternalistic message is emphasized in a closing garden scene which shows Anna and Marshall, together with Gene and Dorothy (now happily married) and their healthy new baby six years after Anna's treatment. Marshall turns to his wife and says: "Dearest, it is just six years since Dr. Clinton performed your operation – and how simple it was after all." To which Anna responds: "Yes, but I might have been misled and waited too long except for you. Dr. Clinton says it was only successful because it was taken in time." Audiences may be left wondering what happened to Simpkins, and what sort of operation Clinton performed on Anna that allowed her husband to describe it as "simple"—a standard treatment for breast cancer at the time would have been a radical mastectomy. Nevertheless, the film's message is that medical knowledge and skills saved both Anna and her family. Where the poster "If Daddy had only known this!" (Figure 1) portrayed a family abandoned by the death of an ignorant husband and father, *The Reward of Courage* portrayed a family saved by a knowledgeable and brave husband and father. One ASCC official welcomed the film as "a touching, yet fascinating story, depicting ignorance of the laity, the shrewdness of quackery and the rescue by intelligence in a case of cancer."⁵⁴

A final word might be said about the title — *The Reward of Courage*. The title is something of a puzzle, since the main beneficiaries of medical treatment — Anna, Dorothy and possibly Simpkins — display no courage until confronted by their husband, employer, or physician. It may be that that Anna's surgery demonstrates last-minute courage, or that Dorothy demonstrates courage when she overcomes her false fear of the hereditary taint of cancer. But, the overall message is that the women in the film are saved by their menfolk: Anna because she endangers herself through her fearfulness and gullibility, and is rescued by her husband; Dorothy because she endangers her marriage through ignorance of the (non)hereditary nature of cancer, and eventually comes to accept Gene's advice to seek the advice of someone who knows.

If the women are gullible, fearful, and ignorant, the men — especially Gene and Marshall — are courageous. Both men exhibit courage when they confront Maxwell, and also by deciding to support the clinic. Gene is courageous because he incurs the suspicion of his boss who initially doubts the value of the clinic, and Marshall is courageous perhaps because he incurs the financial risk of a clinic he is initially unconvinced about. Their rewards are Anna's life, Dorothy's happiness, the birth of a baby, the saving of their families, and Gene and Dorothy's marriage. By accepting the advice of their husband, fiancé, and physician, Anna and Dorothy not only save themselves but also the happiness of those they love. As the closing scene suggests, the reward of courage is not only life, but also a happy, harmonious family.

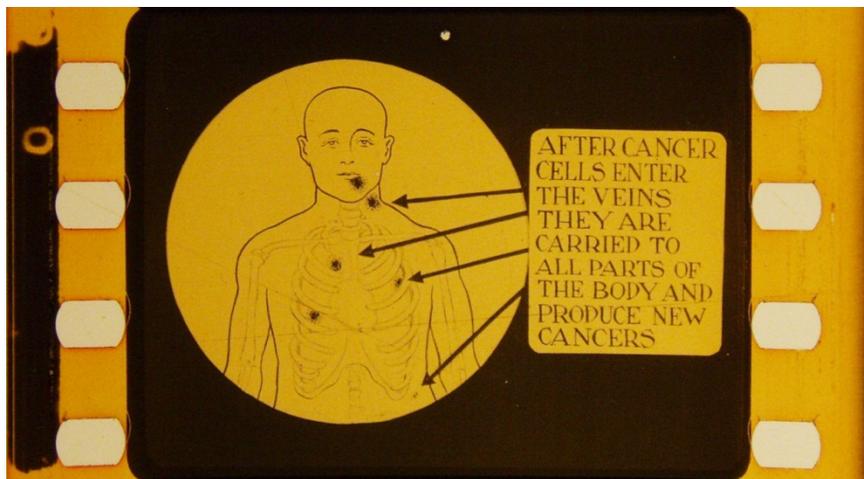
It may also be that the title was also important to the filmmakers because of its value as a marketing tool. It likely served to encourage the public to (courageously) overcome their fears of cancer, and seek proper help. It did this by promising potential viewers an uplifting story about cancer, and a series of inspiring role models including Gene, Marshall, Dale, and the off-screen Clinton. It may also have served to evoke an earlier successful commercial film also

called *Reward of Courage* (1913) in which the hero, hobbled by a sprained ankle, thwarted a married man who made advances to his sweetheart.⁵⁵ In the 1913 film the heroine gave herself to the hero as a reward for his courage; in the 1921 film, one heroine (Dorothy) gave herself to a hero following his dash to save her mother from his rival in love; another (Anna) gave herself to the surgeon's knife perhaps as reward for her husband's courage.

Qualified enthusiasm

If the ASCC commissioned *The Reward of Courage* amid a growing enthusiasm about the value of film as a tool of education, it also came to worry that the film or its subject matter might undermine its message of early detection and treatment.⁵⁶ Part of the concern was that the medium of film was so powerful that it could exacerbate existing public fears and concerns about the disease or its treatment, and so prompt people to delay seeking help. With such concerns in mind the ASCC sought to remove or tone down scenes or subjects that it worried might harm the message it hoped to get out. In correspondence, Osborne suggested that an early version of the film or its script included some operative or hospital scenes, but that they were eliminated from the final version because the organization worried that any hint of radical surgery—the recommended treatment of the time—had the potential to undermine educational efforts by frightening people away from their physicians. People were as scared of the treatment as the disease. “I believe,” Osborne noted,⁵⁷ “the public will respond much more readily to the suggestion of immediate attention to anything suggesting cancer, if the arrangements for radical treatment are kept in the background and left to the physician after the patient has applied for advice.”

Figure 9



Part of the animated section of the film showing the spread of cancer and its consequences, highlighted by arrows. The line drawing of the human figure and dark blotches of the tumors also serve to counter the prospect of any paralyzing fear or disgust that might be evoked by a live action image of tumors.

Thus for all their enthusiasm about this new wondrous cinematic technology, the ASCC kept very close eyes on the production of the film, hoping to ensure that it did the work the organization wanted it to do.⁵⁸ In addition to removing treatment and hospital scenes, it also ensured that no live-action shots of tumors were screened: The breast examination is done discreetly, so that Anna’s cancer is not shown. (Fig. 5) The only tumors that the audience sees are in an animated section of the film, which shows the growth and development of cancer.⁵⁹ As Kirsten Ostherr has noted, early twentieth-century theories of visual pedagogy often emphasized the appeal of animation to “‘simple-minded’ audiences”⁶⁰ because animation minimized the amount of visual information that an image portrayed, and so made comprehension easier, and sometimes more entertaining. But animation served not only to simplify but also to sanitize a film by removing visually disturbing elements. For the ASCC, the line drawings of tumors and bodies in the animated sequence of *The Reward of Courage* helped to avoid the paralyzing fear or disgust that they feared a live image of a tumor might promote in a viewer. (Fig. 9) The ASCC reassured potential exhibitors and audiences that the film avoided any of cancer’s “more distressing aspects. There is absolutely nothing repulsive or objectionable in the picture.”⁶¹

Table 2

ASCC Activities during the 1921 National Cancer Week, by State

State	No. Lectures	Attendance	Literature (No. Pieces)	News Articles	Theatre slides	Film showings	No. Clinics
California	45	7,000	20,000	200			
Colorado	141	25,000	29,000	72	20 (seen by 208,000)	28	2
Connecticut	45	6,000	59,000	100	45 (shown daily)		
Delaware	12	5,000	15,000	80	6 (seen by 30,000)		
Georgia	47	9,000	21,500	58 (3 cartoons)			
Indiana	116	22,250	8,100	93	36	31	
Kentucky	10	3,000	11,200	39	12		1
Maine	174	10,000	6,375	113	14	8	4
Massachusetts	104	14,515	95,000	67	20 (seen by 100,000)	2	15
Michigan	194	40,000	115,000	323	171	6	44
Minnesota	123	26,575	21,175	103	23 (seen by 300,000)		
Mississippi	63	25,000	8,000	86	15		
Missouri (St. Louis)	25	6,300	90,700	32	45 (shown daily)		
Nebraska	197	34,000	45,000	4,508	76		
New Jersey	224	85,000	112,000	210	81	6	
New Mexico	130	1,000	4,000	60			
New York (Metro. District)	104	18,575	3,750,000	165	218 (shown daily)		
New York (30 of 54 counties)	143	19,200	60,500	100	5 (shown daily)		
North Dakota	97	6,300	7,000	53	10 (seen by 5,000)		
Ohio	175	46,000	14,400	155			1 permanent clinic opened
Oklahoma	108	22,350	5,100	46	5 (shown 3 days to 5,000)		25
Oregon (Portland)	10	1,000	1,800	12		5	
Rhode Island	5	500	1,500	44	20 (seen by 15,000)		1
South Carolina	200	50,000	20,000	175	8 (shown daily to 15,000)		
Tennessee	497	96,835	6,300	30	150		
West Virginia	53	8,900	6,000	62		4 (seen by 3,000)	1

Sources: “Gleanings for Cancer Week” *Campaign Notes. American Society for the Control of Cancer* 3, 12 (December 1921): [1–4], p.[2]. “Further Reports on Cancer Week,” *Campaign Notes. American Society for the Control of Cancer* 4, 1 (January 1922): [2–4] p.[2]. “Further Reports on Cancer Week,” *Campaign Notes. American Society for the Control of Cancer* 4, 4 (April 1922): [1–4] p.[1].

Even after its release the ASCC tried to keep close control over its message. It remained worried that audiences might react in the wrong way, despite its efforts to control the film’s production. So it tried to ensure that it was only

screened when a trusted delegate of the ASCC, usually a physician, was present to correct any misconceptions, answer any questions, and calm any fears the film, the disease, or its treatment might generate in the public. Films were often accompanied by a lecture which, as noted above, the ASCC scripted for local speakers. They were also part of a broader educational program that included newspaper and magazine reports, showings of slides and posters, free cancer clinics, and educational pamphlets. All of these could be used to counter any unwanted reactions in a movie-going audience.

If the ASCC was cautious about film because it threatened to undermine its public health message, it was also cautious of it because of difficulties of distribution. By February/March 1922, the organization had distributed 22 copies of the film in different parts of the country.⁶² But only a small number of states seem to have shown the movie. Table 2, compiled from post—National Cancer Week reports, suggests the film was shown in 9 states (not including Rhode Island, where the film was shot),⁶³ and other evidence suggests it was also shown in Maryland,⁶⁴ Texas,⁶⁵ Washington state,⁶⁶ and perhaps South Dakota, which acquired a copy of the film at about this time.⁶⁷ Thus for all its early enthusiasm for film as a tool of public health education, *The Reward of Courage* was not quite the centerpiece of the 1921 National Cancer Week the ASCC had originally hoped.⁶⁸

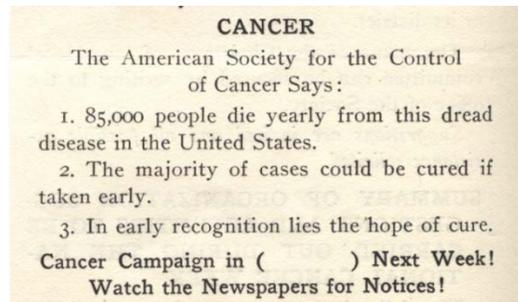
The point is backed up by the lack of attention given to the film in the ASCC's post—Cancer Week assessments. In December 1921, an introduction to a cancer society report on National Cancer Week claimed that 500,000 people had been reached by lectures; several hundred thousand more by short addresses in churches, lodges, and theatres; upwards of 5,000,000 pieces of literature had been distributed; countless other thousands saw display posters or lantern slides on the screens of moving picture houses; and the newspaper and magazine publicity covered more or less the whole reading public of the country. The ASCC's conservative estimate was that no less than 10 million people received the simple facts of cancer control during the week. The introduction made no reference to film.⁶⁹

Part of the reason for this new caution was the realization that film could reach far fewer people than other, often cheaper, educational methods. (See Table 2) Newspaper and magazine reports reached vast audiences, as did posters and pamphlets. Even the humble lecture connected with hundreds of thousands of people, to say nothing of the numerous talks and letters read in churches and synagogues — the Cancer Week began on a Sunday, a perfect day to reach churchgoers, while Jews could have gotten a jump start the day before or rounded the week off on Saturday, November 5th.⁷⁰ Other educational technologies such as theatre slides also seem to have reached larger audiences than film. In Denver, for example, the 3,000 people who saw *The Reward of Courage* at the Auditorium Theater, were dwarfed by the 200,000 who read the picture slides at moving picture theatres.⁷¹

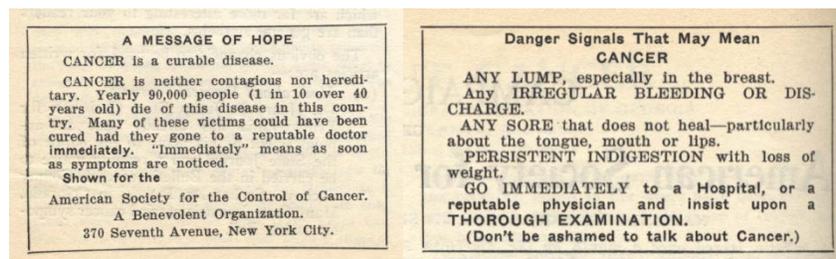
As such reports suggest, the ASCC came to believe that film did not reach the size of audience that other educational methods could reach. Nevertheless, it could reach those who saw it in ways that other methods did not. No one claimed that a glass slide shown before a movie theatre audience had the same impact as a 30-minute film; indeed these often did little more than advertise the existence of the Cancer Week, direct audiences to other sources of information, and sometimes provide a list of the early warning signs and what to do about them. In Denver, for example, Powers' slide directed people to local newspapers, which themselves directed audiences to events such as lectures, diagnostic clinics, and perhaps film shows, in addition to providing some basic information on cancer. (Fig. 10) The thousands of sermons, lectures, and articles in newspapers, even the numerous pamphlets and other literature, aimed to create pathways by which patients would get to the doctor. The film was only a small part of this broader effort and, given the fears that the ASCC had about the potential of film to undermine its own message, it was a medium that would need careful handling.

Figure 10

A



B



A) Dr. Powers' slide shown in Denver. B) Two slides prepared and financed through the efforts of Mrs. Samuel Adams Clark for the 1921 "Cancer Week" in New York City. These last two slides could be purchased from the ASCC on glass for 16 cents each and on mica for 8 cents each. Sources: "Announcement of the Plans and Organization of the National Cancer Week. October 30–November 5, 1921," *Campaign Notes. American Society for the Control of Cancer*, 3, 7 (July, 1921): [1–4], p. [2]. "Suggested Plans for National Cancer Week November 12–18, 1922," *Campaign Notes of the American Society for the Control of Cancer* 4, 8 (August, 1922): [1–4], p. [2].

Yet, despite this caution *The Reward of Courage* remained an important part of the ASCC's educational efforts. The following year — following complaints about the amount of work involved in the 1921 Cancer Week — Charles Powers recommended a more streamlined plan for the 1922 Cancer Week, focused on three “prime essentials”⁷² — written articles, scientific meetings and public lectures, and motion picture theatres. The last of these — motion picture theaters — was selected in part because of the popularity of the venue as a place of entertainment in the 1920s — the social stigma attached to film and film audiences had disappeared during the late 1910s and early 1920s, and the composition of movie audiences had shifted from being predominantly working class and immigrant to include the middle class. In Powers' view, these theatres were to be the sites of lantern slide screenings, four-minute lectures prepared by the ASCC, the distribution of cancer leaflets (especially at matinees attended by adult women), and showings of *The Reward of Courage*. The plans for the campaign also noted that the film was already being widely used in many picture theatres.

Thus while the film might not have lived up to early expectations, it remained a key part of ASCC education efforts during the 1920s, screened and screened again, often alongside other educational efforts. It is impossible to document all these events. However, in 1922 Joseph Bloodgood presented a series of lectures to accompany the film.⁷³ Also, in Denver during the second (1922) annual Cancer Week, it was shown alongside an educational street banner, an exhibit on cancer, and the poster “If Daddy had only known this!”⁷⁴ (Fig. 1) The following year, 1923, it was screened in a number of Maine movie houses (together with some lantern slides and cancer talks),⁷⁵ and in Cincinnati where it was used alongside public education radio talks, lectures, booklets, and leaflets.⁷⁶ Also in 1923, the ASCC sent a copy of the film to each state and province for use during its campaign, urging members to assist their state and provincial chairman to keep this film busy by arranging with local movie houses to have it shown.⁷⁷ The film prompted the Argentine Ambassador to mention to Charles Powers that he wanted the cancer film translated into Spanish for use in the Argentine.⁷⁸ It was also shown abroad in Canada⁷⁹ and Australia.

The Reward of Courage not only remained in use during the 1920s, it was the stimulus for the production of other cancer films. During the 1922 Cancer Week, the ASCC reported the existence of a 75-foot cancer film carried as a trailer by all the largest theatres in Michigan, and a 60-foot film shown in picture houses in Omaha and Lincoln, and the cancer society reported that other local committees might also have produced or distributed their own films.⁸⁰ In 1923, there is mention of another short film (probably a theater newsreel) produced by Fox News Weekly about the St. Lukes Hospital X-ray clinic, apparently seen by some 30 million persons.⁸¹ The ASCC itself produced a second film, *A Fortunate Accident*, in 1925, also produced by the Eastern Film Corporation,⁸² and a third movie was produced in 1929. *By The Way* (Visugraphic Pictures, 1929) was a motion picture trailer for an educational booklet, in which animated cartoons from the booklet stepped forward from the screen and introduced themselves.⁸³

Lost and Found

The Reward of Courage remained in circulation for much of the 1920s and early 1930s, after which it was gradually dropped from the ASCC's educational programs as new educational films were produced, the original prints deteriorated with time and use, the visual aesthetics of motion pictures changed, and new technologies such as sound came in. The film likely came to have a dated feel, and many prints were scratched or damaged in other ways. The ASCC made additional prints before 1923, and the version in the digital collections of the National Library of Medicine is from a 1925 print.⁸⁴ Copies remained in some film libraries for a while long after new prints were no longer produced.⁸⁵ But the film was fragile, and it gradually disappeared from these and other collections. By the time I joined the National Library of Medicine in 2002, the movie seemed long gone.

One of my research interests was the history of cancer and especially cancer education. It turned out that the National Library of Medicine had perhaps the world's largest collection of historical medical movies—films used in medical training, public health education, medical advertising, as part of scientific or medical experiment or practice, or some combination of all. Some were made just for fun or to demonstrate virtuosity and skill in the operating room, laboratory, or clinic. Some were home movies, some difficult to watch (because of the subject matter), and some quite fun (also because of the subject matter). The Library had copies of films by Disney, Hanna-Barbera Productions, Hugh Harman Productions, United Productions of America (UPA), and other entertainment filmmakers, though it doesn't generally collect entertainment films. All of these companies made public health education and other historical medical films, the focus of the Library's collection.

So I counted myself lucky and went looking for cancer films, only to be disappointed. Although the Library had some public education films about cancer (especially from the 1940s and 1950s), and some fairly gruesome surgical training films, in general it did not have a strong collection of cancer education and training films. I began compiling a list of cancer films from the publications of the ACS, the National Cancer Institute (NCI) and other cancer organizations, and my suspicions that the collection was seriously deficient were confirmed. I was lucky enough to find copies of some films elsewhere, including the National Archives, the Library of Congress, and the ACS itself, which had kept many of its films. But some movies on the list were missing, including *The Reward of Courage*.

Then I heard about a collection of films at the Library of Congress that had not been fully cataloged. It was little more than an inventory when I looked through it, like a long electronic packing slip. But in amongst the list of films was a title called *Reward of Courage*. It was a movie about cancer, but dated 1925, not 1921,⁸⁶ and it was unscreenable since it was still in nitrate form (see reverse text in Figure 4), and held in a secure location at the Wright-Patterson Air Force Base in Dayton, Ohio, where the Library of Congress held some of its film

collections at that time. So on April 20, 2006, I took a plane to Dayton, and arrived at the military base.

Nitrate films are highly unstable.⁸⁷ As they age they can suffer from shrinkage, fading, and brittleness, and release gases that damage the emulsion, among other forms of physical deterioration. Perhaps most seriously, they become highly flammable at relatively low temperatures, and nitrate fires are almost impossible to put out since the film stock creates its own oxygen when it burns. Disastrous fires have consumed numerous film collections, and lives and buildings have been lost because of this early form of film. So I was hardly reassured when I turned up at Dayton, to go through military security, to be met by a film archivist and escorted to a remote corner of the base, to a building far removed from any other. No one was taking any chances of a fire in the film collection affecting anything else on the base. The building seemed like a giant refrigerator: storage at low temperatures being a means of delaying decomposition. It was a beautiful, warm day outside, as I recall, and I was plunged into what seemed like sub-arctic conditions inside, and led through corridors and dark spaces, to a small room where my film was laid out on a table.

It was at that point that I was told that I could **not** screen it. It was too precious and fragile to be run through a projector. I misheard what they said, and thought that they meant I could not view it at all, in which case why had I come to Dayton? In fact what they meant was that I would have to watch it frame by frame on a light table. This was a table with a translucent top illuminated from below, and with reels at either end onto which the film would be mounted. I would have to wind the entire film by hand from one reel to the other, stopping to view each frame or series of frames as they passed over the illumination. There was no magnification, and the individual images were difficult to see until someone loaned me a magnifying glass. The two reels of this film — normal running time 30 minutes — would take an entire day to view, and I would just make my flight back to Washington.

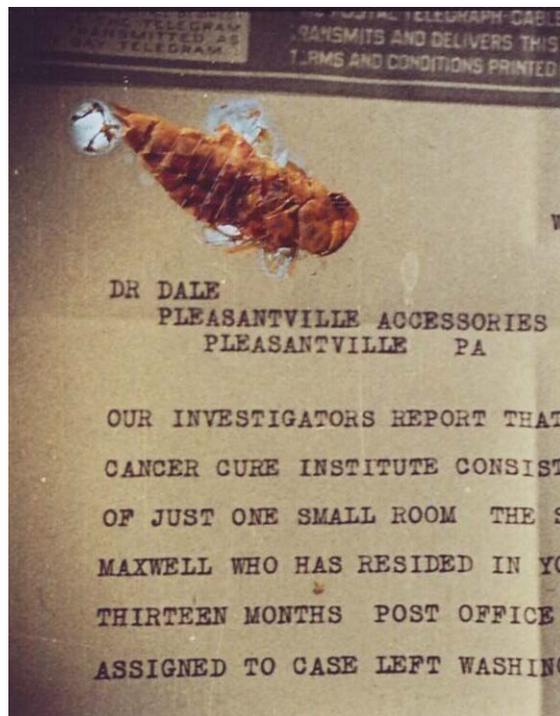
But, I was in luck. This was the *Reward of Courage* that I was looking for, and in beautiful condition. The movie was a silent movie — it was made in 1921 — and it was tinted: parts of it — often the sad parts — tinted blue, other parts — mainly the happy parts — tinted pink, and the rest was a standard amber color. (Fig. 6)

The movie was one of a number of American films that had been returned from the Australian National Film and Sound Archive.⁸⁸ Australia was the end of the distribution line, and American films that ended up out there often did not return. So *The Reward of Courage* had at some point gone out there, and stayed until it was shipped back along with many others in 1998, repatriated to the Library of Congress. It doesn't seem to have been used very much in Australia. Other films of this vintage are badly scratched and faded, with broken sprockets and split splices, and often the ends of the film are missing, since these were the bits that were jammed time and again into projectors and often broke. It is true that there were some scratches and a few broken sprockets in this film, mostly at the ends of the film, but very little as compared to others.⁸⁹ It was

either used with extreme care, or perhaps hardly used at all, and stored in excellent conditions before being shipped back to the United States.

I went back to Bethesda, and arranged with the National Library of Medicine for a copy to be made on safety film, and a few months later we sat down to watch a copy on the large screen, no magnifying glass this time, the actors and animation coming to life for perhaps the first time in 70 years or more. It was an exciting time for me and my colleagues at the Library, and I had little difficulty in planning a public showing of the film, and in commissioning a musical score from Maurice Saylor to make this 30-minute silent film about cancer appealing to a modern audience. The film may well have had musical accompaniment when shown in the 1920s, but the score has not survived, if there ever was a score since piano accompanists often played without sheet music.⁹⁰ The first live performance of the Saylor score by the Snark Ensemble accompanied a screening at the National Academy of Sciences on November 10, 2011. The Snark Ensemble also recorded the score for the sound track of one of the versions of the film that accompanies this essay.⁹¹

Figure 11



The remains of an unidentified bug found during the cleaning of *The Reward of Courage* by Colorlab in 2006. Source: National Library of Medicine.

I tell these stories to raise a more general issue. I've already mentioned at some of the problems with this film. It was a nitrate film, and in need of very careful care — a cold room, and a building far from many others, and it was so fragile that it could not be screened without potential damage. So the film had to be

conserved and preserved before it could be screened. Remember, I first viewed the film frame by frame, winding it by hand from one reel to another over a light table with a magnifying glass. It was screened for the first time only when converted to safety film. In the process of making the film viewable, it turned out that the original nitrate needed some cleaning. Bugs had literally gotten into the works, and needed to be flushed out. (Fig. 11) Colorlab, the company that made the safety film copy, first had to clean the film, flush out the bugs, the dirt, oil and other detritus, repair sprockets, measure shrinkage, and inspect it for fogging and fading before it could make a safety copy.

The original nitrate film was modified in the course of conservation and still survives in some cold, dark corner of the Library of Congress. The copy that accompanies this essay is taken from the safety film, and went through a complex series of processes which means it only approximates the original. First, the safety film was not a simple mirror copy of the original nitrate film. The technique of making a copy involved first making a black and white negative of the film, from which a black and white positive was produced, onto which the colors were added later. The technicians who did the work had to find the right tints, match them to the original, and then add them onto the black and white print. Much of this was done using film analyzer, a tint log, and by eye.⁹² It was not dissimilar to matching the colors after a car repair; sometimes they are close, sometimes not so close to the original paintwork.

The process of preservation did not end here. The National Library of Medicine required two other copies be made—a high quality Betacam SP videotape to ensure that the safety film was not damaged with constant use, and a DVD for routine viewing to ensure that the Betacam SP tape was not damaged. In each stage there were judgments to be made, which made each stage as much an artifact as a faithful reproduction of the original nitrate film. In the case of the color of the film, it was not even entirely clear to what extent the colors on the original nitrate film from Australia had changed over time. As the technicians at Colorlab acknowledged, the colors in the nitrate film in 2006 might have been different to those at first showing in 1921. Nitrate films keep their color well compared to some other types of film, but there was evidence of fading in this print, with consequent knock-on effect for the colors in the copies.

In addition, it was not clear whether the colors would have been the same for all print versions of the film. The nitrate film turned out to have come from a film stock probably made in 1925,⁹³ and there was no way to know whether the 1925 colors matched the original 1921 print: it depended, for example, on how the dyes were mixed and matched to the original. What you will see is a best guess of what the original 1925 film looked like, but a guess all the same by the technicians who did the conversion. Even their best guesses could not tell us whether the 1925 version matched that in 1921, nor could they take into account the vagaries of screening—colors may have varied depending on the bulb in the film projector (was it under- or over-lit?), and the screen onto which the film was projected, among other factors. It was also an expensive guess or series of guesses. The entire process of preserving the nitrate film, making a safety film, video, and DVD copies cost just under \$6,900 for the whole thing, to

say nothing about getting me to Dayton to view the film, which makes one wonder how much can be preserved at this cost.⁹⁴

Thus one of the points of this essay is the artifactual nature of the preservation process. But there is a further final point, which is about how we go about choosing which films to preserve, especially given the high cost of film preservation and conservation. Part of the issue is that we know so little about the range of films that were made. In the case of utility or sponsored films such as *The Reward of Courage*, there is no equivalent of the various catalogs of entertainment films, which give an indication of the range of films produced, those that survived and those that did not.⁹⁵ We know that a significant proportion of early entertainment films have vanished, and the proportion of early utility films that has survived is probably even smaller. But it is difficult to know which have been lost because there is no census of such films, and we risk losing a valuable part of our medical and scientific heritage as a result, for some that are lost may have survived, languishing in some unknown closet somewhere. As my example of the cancer film shows, I only knew that *The Reward of Courage* had once existed, and that it was in all likelihood the earliest-ever cancer education film, because I had compiled a list of all cancer films, those surviving and those which were lost, and was able to go looking for the missing film.

Such a census gives a clue as to how we might begin to make rational choices about which films to look for, and which to prioritize in terms of conservation and preservation given the high cost of this. These films are important resources for understanding the historical, visual, and material culture of medicine and science, but a vulnerable resource, costly to preserve and restore. Too many films have already been lost, and others are neglected, silently decomposing as I write.

Acknowledgments. Earlier versions of this paper were given at the D.C. Art Science Evening Rendezvous (DASER) at the National Academy of Sciences, Washington, DC, October 20, 2011, and at a special screening of *The Reward of Courage* also at the National Academy of Sciences, Washington, D.C., November 10, 2011. The preservation of this film would not have happened without the help of Zoran Sinobad, Ken Weissman, and Christel Schmidt at the Library of Congress; Elizabeth Fee, Paul Theerman, Sarah Eilers, Karen Sinkule, Nancy Dosch, and Margaret Kaiser at the National Library of Medicine; and Russ Suniewick, Jake Kreeger, Kevin Fallis, and Chris Hughes at Colorlab. At the National Institutes of Health, History Office, Hank Grasso cropped and edited the images from the film.

Further Reading

Cancer education films in the 1920s

Cantor, David. "Uncertain Enthusiasm: The American Cancer Society, Public Education, and the Problems of the Movie, 1921–1960." *Bulletin of the History of Medicine* 81 (2007): 39–69.

Cantor, David. "Choosing to Live: Cancer Education, Movies, and the Conversion Narrative in America, 1921–1960." *Literature and Medicine* 28 (2009): 278–332.

Cantor, David. "Between Movies, Markets, and Medicine: The Eastern Film Corporation, Frank A. Tichenor, and Medical and Health Films in the 1920s." Paper presented at the conference Communicating Good Health: Movies, Medicine, and the Cultures of Risk in the Twentieth Century, Fondation Brocher, Hermance, Switzerland, May 26–27, 2011.

History of U.S. cancer control in the 1910s and 1920s

Aronowitz, Robert A. *Unnatural History: Breast Cancer and American Society*. Cambridge: Cambridge University Press, 2007.

Cantor, David, ed. *Cancer in the Twentieth Century*. Baltimore and London: Johns Hopkins University Press, 2008.

Gardner, Kirsten E. *Early Detection: Women, Cancer, and Awareness Campaigns in the Twentieth-Century United States*. Chapel Hill: University of North Carolina Press, 2006.

Leopold, Ellen. *A Darker Ribbon: Breast Cancer, Women, and their Doctors in the Twentieth Century*. Boston: Beacon Press, 1999.

Lerner, Barron H. *The Breast Cancer Wars: Hope, Fear, and the Pursuit of a Cure in Twentieth-Century America*. New York: Oxford University Press, 2001.

Löwy, Ilana. *Preventive Strikes: Women, Precancer, and Prophylactic Surgery*. Baltimore: Johns Hopkins University Press, 2009.

Patterson, James T. *The Dread Disease: Cancer and Modern American Culture*. Cambridge, MA: Harvard University Press, 1987.

Wailoo, Keith. *How Cancer Crossed the Color Line*. Oxford: Oxford University Press, 2011.

Notes

¹ Curtis E. Lakeman, "How the Public Health Nurse Can Help to Control Cancer," *Public Health Nurse Quarterly* 8, 4 (October 1916): 14–26, p.16. See also "What Everyone Should Know about Cancer," *Health News. Monthly Bulletin New York State Department of Health New Series*, 15, 2 (February 1920): 36–59, p. 38.

² Osborne started at the ASCC on November 1, 1919, and was formally appointed executive secretary of the ASCC on November 5, 1919: "Appointment of a New Executive Secretary," *Campaign Notes. American Society for the Control of Cancer* 1, 19 (November 1919): [2]. (Some of the early issues of some of the ASCC's Campaign Notes are unpaginated; bracketed page numbers are my own pagination). Osborne's biography comes mainly from this article and from "Frank J. Osborne, East Orange." In *Manual of the Legislature of New Jersey. One Hundred and Sixty-Eighth Session*, compiler, John P. Dullard (Trenton: State of New Jersey, 1944), 370–71.

³ Frank J. Osborne, "Venereal Disease Control in the Oranges," *American Journal of Public Health* 6, 6 (June 1916): 558–59. Frank J. Osborne, "A Health Exhibit for Men. An Educational Exhibit on Venereal Disease Control and Prevention Presented at Coney Island by the New York Social Hygiene Society," *Social Hygiene* 3 (1917): 27–49. Frank J. Osborne, *The Control of Venereal Diseases from the Public Health Standpoint* (New York: The New York Social Hygiene Society, 1917). Frank J. Osborne, *Community Control of the Venereal Diseases* (New York: The American Social Hygiene Association, 1918). Frank J. Osborne, "The Law Enforcement Program Applied," *Social Hygiene* 5 (1919), 83–96. Frank J. Osborne, "Venereal Disease Control as a War Measure," *Health News. Monthly Bulletin of the New York State Department of Health New Series*, 13, 10 (October 1918): 275–81. F. J. Osborne in Major A. N. Thomson, "The Problem of Venereal Disease Control," *New York State Journal of Medicine* 18, 11 (November 1918): 451–55, p.453 & pp.454–55. Frank J. Osborne, "Education of the Public in Social Hygiene," *Health News. Monthly Bulletin of the New York State Department of Health, New Series* 8, 4 (April 1918): 94–97.

⁴ "Health Coordination Committees," *Campaign Notes. American Society for the Control of Cancer* 1, 19 (November 1919): [2–3], especially p. 3.

⁵ On the NASPT/NTA see Richard Harrison Shryock, *National Tuberculosis Association, 1904–1954: A Study of the Voluntary Health Movement in the United States* (New York: National Tuberculosis Association, 1957). Michael E. Teller, *The Tuberculosis Movement: A Public Health Campaign in the Progressive Era* (New York: Greenwood Press, 1988). More generally on tuberculosis see Barbara Bates, *Bargaining for Life: A Social History of Tuberculosis, 1876–1938*

(Philadelphia: University of Pennsylvania Press, 1992). Sheila M. Rothman, *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in American History* (New York: Basic Books, 1994). Cynthia A. Connolly, *Saving Sickly Children: The Tuberculosis Preventorium in American Life, 1909–1970* (New Brunswick, NJ: Rutgers University Press, 2008).

⁶ American Society for the Control of Cancer, *Facts About Cancer* (New York City: American Society for the Control of Cancer, 1914). “Surgeons Discuss Cancer Campaign,” *Survey* 31 (13 December 1913): 508–9, p. 509. Francis Carter Wood, “What Every Woman Should Know about Cancer,” *Campaign Notes. American Society for the Control of Cancer* 1, 9 (January 1919): [1–4], esp. pp.[1–2]. “Suggestions to State and Local Committees,” *Campaign Notes. American Society for the Control of Cancer* 1, 12 (April 1919), [1–4], p.[4]. For discussions of the connections between the ASCC and the anti-tuberculosis campaign see James T. Patterson, *The Dread Disease: Cancer and Modern American Culture* (Cambridge, Mass.: Harvard University Press, 1987), 53. Kirsten E. Gardner, *Early Detection: Women, Cancer, and Awareness Campaigns in the Twentieth-Century United States* (Chapel Hill: University of North Carolina Press, 2006), 22.

⁷ *What Everyone Should Know About Cancer: A Handbook for the Lay Reader* Prepared by a Special Committee of the American Society for the Control of Cancer (New York: American Society for the Control of Cancer, 1920), 8.

⁸ “Dr. Winslow and Cancer,” *Campaign Notes. American Society for the Control of Cancer* 2, 4 (April 1920): [3–4], p.[4]. C-E. A. Winslow, “The Untilled Fields of Public Health,” *Science*, 51 (January 9, 1920): 23–33, p.28.

⁹ The connection between cancer education and venereal disease education is also evident elsewhere. In South Dakota, for example, the State Board of Health’s Division of Education and Publicity was an outgrowth of the effort begun by the Division of Venereal Disease Control in the spring of 1920. One of the first actions of the new Division of Education and Publicity was to purchase some public health education films including *The Reward of Courage*. M.C. Haecker, Director, “Report. Division of Education and Publicity,” *Fifth Biennial Report of the South Dakota State Board of Health* (July 1, 1920 to June 30, 1922), 55–63, esp. p. 57. More generally on anti-venereal disease campaigns see Allan M. Brandt, *No Magic Bullet: A Social History of Venereal Disease in the United States since 1880* (New York: Oxford University Press, 1985).

¹⁰ Osborne, “A Health Exhibit for Men,” 28. For anti-quack warnings, see also Osborne, “Venereal Disease Control in the Oranges,” 558.

¹¹ Osborne, *The Control of Venereal Diseases*, 3.

¹² Osborne, “Education of the Public in Social Hygiene,” 95.

¹³ Osborne, "Education of the Public in Social Hygiene," 97. For a discussion of British medical conceptions of the public see David Cantor, "Representing 'The Public': Medicine, Charity and Emotion in Twentieth-Century Britain." In *Medicine, Health and the Public Sphere in Britain, 1600–2000*, ed. Steve Sturdy (London and New York: Routledge, 2002), 145–68.

¹⁴ Gardner, Early Detection. Keith Wailoo, *How Cancer Crossed the Color Line* (New York: Oxford University Press, 2011).

¹⁵ Frank J. Osborne, "Good News of a Bad Subject," *Campaign Notes. American Society for the Control of Cancer* 2, 8 (August 1920): [3–4].

¹⁶ "Dr. Charles A. Powers Drops Dead in Club," *New York Times*, December 24, 1922, 17. Ellsworth Eliot, "Charles Andrew Powers," *Surgery, Gynecology and Obstetrics* 51 (1930): 424–28. "Charles A. Powers." In *Encyclopedia of Biography of Colorado; History of Colorado*, William N. Byers (Chicago: The Century Publishing and Engraving Company, 1901), 433–34.

¹⁷ This was not the first Cancer Week. The Cancer Control Committee of the Ohio State Medical Association had organized a Cancer Week in April 1920 modeled on earlier "Health Weeks" organized in some cities and states. "The Campaign in Ohio," *Campaign Notes. American Society for the Control of Cancer* 1, 20 (December, 1919): [4]. "How Ohio is Developing its Campaign," *Campaign Notes. American Society for the Control of Cancer* 2, 1 (January 1920): [2–3]. On Harding's support, which came shortly after the week was over, see "Letter from President Harding," *Campaign Notes. American Society for the Control of Cancer* 3, 11 (November 1921): [1].

¹⁸ "Announcement of the Plans and Organization of the National Cancer Week. October 30 – November 5, 1921," *Campaign Notes. American Society for the Control of Cancer* 3, 7 (July 1921): [1–4].

¹⁹ "Mississippi Organization," *Campaign Notes. American Society for the Control of Cancer* 3, 8 (August 1921): [3–4].

²⁰ See Table 2.

²¹ Pamphlets included American Society for the Control of Cancer, *What Are You Going to Do About It?* (New York: American Society for the Control of Cancer, 1921). American Society for the Control of Cancer, *Fighting Cancer with Facts* (New York: American Society for the Control of Cancer, 1921). American Society for the Control of Cancer, *The Prevention and Cure of Cancer. The Responsibility of Physicians in the Campaign Against Cancer* (New York: American Society for the Control of Cancer, 1921). American Society for the Control of Cancer, *Vital Facts About Cancer* (New York: American Society for the Control of Cancer, 1921). *What We Know About Cancer: A Handbook for the Medical Profession*, prepared by a committee of the American Society for the Control of Cancer, and

published jointly by the American Society for the Control of Cancer and the Council on Health and Public Instruction of the American Medical Association (Chicago: American Medical Association, 1918). *What Everyone Should Know about Cancer*, and Lakeman, "How the Public Health Nurse Can Help to Control Cancer." On their use, see for example "Mississippi Organization." On Posters, see "Some Unique Publicity Methods," *Campaign Notes of the American Society for the Control of Cancer* 4, 12 (December 1922): [2].

²² See Table 2.

²³ See Table 2.

²⁴ "Some Unique Publicity Methods."

²⁵ "Methods Developed During Cancer Week," *Campaign Notes. American Society for the Control of Cancer* 3, 11 (November 1921): [2].

²⁶ "Methods Developed During Cancer Week." "Nebraska," *Campaign Notes. American Society for the Control of Cancer* 4, 1 (January 1922): [2].

²⁷ "Methods Developed During Cancer Week." "Nebraska."

²⁸ Martin S. Pernick, "Thomas Edison's Tuberculosis Films: Mass Media and Health Propaganda," *Hastings Center Report* 8, 3 (June 1978): 21–27; Martin S. Pernick, *The Black Stork: Eugenics and the Death of "Defective" Babies in American Medicine and Motion Pictures since 1915* (New York: Oxford University Press, 1996). Martin S. Pernick, "More than Illustrations: Early Twentieth-Century Health Films as Contributors to the Histories of Medicine and of Motion Pictures." In *Medicine's Moving Pictures. Medicine, Health, and Bodies in American Film and Television*, ed. Leslie J. Reagan, Nancy Tomes and Paula A. Treichler (Rochester, NY: University of Rochester Press, 2007), 19–35. Miriam Posner, "Communicating Disease: Tuberculosis, Narrative, and Social Order in Thomas Edison's Red Cross Seal Films." In *Learning with the Lights Off. Educational Film in the United States*, ed. Devin Orgeron, Marsha Orgeron and Dan Streible (New York: Oxford University Press, 2012), 90–106. Stacie A. Colwell, "The End of the Road: Gender, the Dissemination of Knowledge, and the American Campaign Against Venereal Disease during World War I," *Camera Obscura*, 29 (May 1992): 91–129. Susan E. Lederer and Naomi Rogers, "Media." In *Medicine in the Twentieth Century*, ed. Roger Cooter and John Pickstone (Amsterdam: Harwood Academic Publishers, 2000), 487–502. Lisa Cartwright, *Screening the Body: Tracing Medicine's Visual Culture* (Minneapolis: University of Minnesota Press, 1995). Adolf Nichtenhauser, "A History of Motion Pictures in Medicine" (unpublished book MS, ca. 1950), Adolf Nichtenhauser History of Motion Pictures in Medicine Collection, MS C 380, Archives and Modern Manuscripts Program, History of Medicine Division, National Library of Medicine, Bethesda, Md. For contemporary discussions of the post-war use of film including in public health see also Leslie Willis Sprague, "Motion Pictures in

Public Health," *Modern Medicine* New Series, 1, 4 (August 1919): 330–32. Leslie Willis Sprague, "Uses of Motion Pictures in Industrial Medicine," *Modern Medicine* New Series, 1, 5 (September 1919): 396–98. Leslie Willis Sprague, "Uses of Motion Pictures in Industrial Diseases," *Modern Medicine* New Series, 1, 6 (October 1919): 496–98.

²⁹ F.J. Osborne to Mrs. Mead, March 2, 1921, Laura Spelman Rockefeller Memorial Archives, Series III, Box 5, Folder: "American Society for the Control of Cancer, 1921-23," Rockefeller Archive Center, Sleepy Hollow, New York. (Hereafter Laura Spelman Rockefeller Memorial Archives). On Osborne's earlier advocacy of the use of film in public health education see Osborne, "Education of the Public in Social Hygiene," 95.

³⁰ On this scrapbook, see David Cantor, "Between Movies, Markets, and Medicine: The Eastern Film Corporation, Frank A. Tichenor, and Medical and Health Films in the 1920s" (paper presented at the conference Communicating Good Health: Movies, Medicine, and the Cultures of Risk in the Twentieth Century, Fondation Brocher, Hermance, Switzerland, May 26–27, 2011).

³¹ Osborne to Mead, March 2, 1921.

³² Cantor, "Between Movies, Markets, and Medicine."

³³ This is a correction to the figure presented in David Cantor, "Uncertain Enthusiasm: The American Cancer Society, Public Education, and the Problems of the Movie, 1921–1960," *Bulletin of the History of Medicine* 81 (2007): 39–69, pp. 42–43. There I stated incorrectly that the cost of *The Reward of Courage* was \$8,500. The \$8,000 was to cover the costs of both medical and public films, the public education film estimated at \$2,500, the medical film at \$3,500, and the remainder covering production of prints, shipping cases, reels and film containers. Osborne noted that Tichenor billed the ASCC \$2,500 for *The Reward of Courage*, less than the (undisclosed) cost of production. Osborne to Mead, March 2, 1921 and F. J. Osborne to W. S. Richardson, July 29, 1921, Laura Spelman Rockefeller Memorial Archives, Series III, Box 5, Folder: "American Society for the Control of Cancer, 1921–23." More generally on the Rockefeller donation see: "The Rockefeller Gift," *Campaign Notes. American Society for the Control of Cancer* 3, 5 (May, 1921): [2–3].

³⁴ Efforts to produce the medical film were threatened in December 1921 when the ASCC realized that the costs of the Cancer Week outstripped resources. Mrs. Robert G. Mead, the Chair of the Finance Committee, began to think of the unused Rockefeller money for the medical film as a loan to take care of these unforeseen expenses. However, plans to redirect the money were scuttled, and Mead was forced to appeal to the Rockefeller Foundation for an additional \$7,500 to make up the Cancer Week deficiency. Mrs. Robert G. Mead to W.S. Richardson, 3 December 1921, Laura Spelman Rockefeller Memorial Archives, Series III, Box 5, Folder: "American Society for the Control of Cancer, 1921–23."

In January 1923, Osborne reported that a scenario for the medical movie had begun, but I have found no evidence that anything happened after then. A second movie — *A Fortunate Accident* — was released by the ASCC in 1925, but this was targeted at the public not the medical profession. F.J. Osborne to W.S. Richardson, January 25, 1923, Laura Spelman Rockefeller Memorial Archives, Series III, Box 5, Folder: “American Society for the Control of Cancer, 1921–23.”

Although *The Reward of Courage* was the first public health education film about cancer, the proposed medical movie — if it was ever made — would not have been the first motion picture about cancer directed towards a medical and surgical audience. A film called *The Cancer Problem* was shown by Dr. J.M. Martin (Professor of Electro-Therapeutics and X-Ray Methods, Medical Department of Baylor University and State Dental College; Radiographer to Baptist Memorial Sanitarium, Dallas, Texas) at the 13th annual meeting of the Medical Association of the Southwest at Dallas, Texas, October 16, 1918. “Coming Meeting of the Medical Association of the South-West,” *Medical Insurance and Health Conservation* 27 (1917–18): 510–11, p. 511. J.M. Martin, “The Cancer Problem,” *Southwest Journal of Medicine and Surgery* 27 (1919): 34–36. This last article states that the film was 1,240 ft., and reproduced some frames from it. Martin also showed it at the “Twenty-First Annual Meeting of the American Roentgen Ray Society,” *American Journal of Roentgenology* 7 (1920): 513-16, p. 515. “Flashes on the World’s Screen,” *Educational Film Magazine* 4, 5 (November 1920): 20. For another medical film of a cancer operation at Bellevue Hospital by Legend Film Productions see “Cancer Operation Filmed in Detail”, *Educational Film Magazine* 5, 1 (January 1921): 13.

³⁵ For examples of Eastern’s efforts to portray itself as a maker of quality films see the advertisements that coincided with the National Cancer Week, “Films of Quality Solve the Problem of Distribution,” *Moving Picture Age* 4, 10 (October 1921): 33 “Films of Quality Solve the Problem of Distribution,” *Moving Picture Age* 4, 11 (November 1921): 22. Note that the advertisements include the offer: “A list of our clients of National reputation furnished on request to those interested.”

³⁶ Osborne to Mead, March 2, 1921.

³⁷ Shortly before the launch of the Cancer Week, *The Reward of Courage* was shown at the Cincinnati Health Exposition, October 15–22, 1921, see Bleecker Marquette, “The Cincinnati Health Exposition,” *University of Cincinnati Medical Bulletin* 1, 3 (February 1922): 3–23, p. 21.

³⁸ For a detailed description of the film’s narrative see “The Reward of Courage,” *Educational Film Magazine* 6, 6 (December 1921): 11. This description includes some scenes which do not appear in the NLM’s version of the film. These missing scenes include: 1) scene(s) in which Dorothy takes great interest in the clinic, and helps Gene to develop it; and 2) scene(s) in which Anna secures from

Miss Keene a list of Marshall's employees with cancer, following a request for this list from Morris Maxwell — it is at this meeting with Miss Keene that Anna tells her about the lump she has discovered on her breast. This last scene appears to be a prelude to the breast examination scene in the NLM version. It is a puzzle why this account suggests that Anna secures this list. In the NLM version of the film, Marshall informs Maxwell that some of his employees have cancer, and tells him that Dr. Dale can furnish the names. Did Dale refuse to provide the list, was Maxwell cautious in approaching him, or was the list a pretext for Anna to get an examination? It is unknown whether these additional scenes were part of the original version released in 1921 and cut from the NLM's copy (printed in 1925, see below), or whether they were a figment of the reviewer's imagination.

³⁹ Everett S. Lain, "State-Wide Cancer Campaign — February 15th to March 15th," *Journal of the Oklahoma State Medical Association*, 17 (1924): 53–54, p. 54.

⁴⁰ American Society for the Control of Cancer, *Vital Facts About Cancer*, 2.

⁴¹ "What Everyone Should Know about Cancer," 38.

⁴² American Society for the Control of Cancer, *Vital Facts About Cancer*, 2. Emphasis in the original.

⁴³ An opening intertitle labels the company the Pleasantville Accessories Company; the telegram concerning Maxwell is addressed to the Pleasantville Accessories Supply Company.

⁴⁴ Thorstein Bunde Veblen, *The Theory of the Leisure Class* (New York: Kelley, 1965), esp. 27. First published 1899.

⁴⁵ On the role of clinics in Progressive-era health reform see Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York: Basic Books, 1982), 191–92. George Rosen, *The Structure of American Medical Practice, 1875–1941* (Philadelphia: University of Pennsylvania Press, 1983), 32–36, 50–51, 97–98.

⁴⁶ "Consolidated Report of the President and Executive Committee," *Campaign Notes. American Society for the Control of Cancer* 4, 3 (March 1922): [3–4], at p.[3].

⁴⁷ "Textile Strike Spreads to Three Big Pawtucket Mills, which are Forced to Close," *Providence News*, February 9, 1922, 1. See also "Strike at Jencks Spinning Company, Pawtucket [29 July 1919]," *Report of the Commissioner of Labor Made to the General Assembly for the Years 1916–1917–1918–1919*, State of Rhode Island and Providence Plantations (Providence: E.L. Freeman Company Printers, 1921), 200–201. "Jencks Workers Want Same Wage as Textile Folks," *Providence News*, May 26, 1920, 4.

⁴⁸ Cantor, "Uncertain Enthusiasm," 42 and 54. David Cantor, "Choosing to Live: Cancer Education, Movies, and the Conversion Narrative in America, 1921–1960," *Literature and Medicine* 28 (2009): 278–332, p. 280.

⁴⁹ American Society for the Control of Cancer, *Vital Facts About Cancer*, 1.

⁵⁰ There is a continuity error in the chase scene: Marshall is prompted to rush to his wife's aid by a telegram he receives from Washington D.C. that reveals Morris Maxwell's deceit. Maxwell is due at his home that morning, and Marshall arrives just as Anna hands over a \$200 check to the quack. The telegram is dated July 12, 1921; the check August 25, 1921 — a very slow race to the rescue.

⁵¹ James Harvey Young, *The Medical Messiahs: A Social History of Health Quackery in Twentieth-Century America* (Princeton: Princeton University Press, 1967), especially chapter 4, "Fraud in the Mails."

⁵² Some viewers have assumed that the male patient examined by Dr. Dale and a nurse in the company clinic is Simpkins. However, the filmmakers do not identify the patient.

⁵³ In the NLM version of the film Marshall is responsible for putting the workers in his factory at the mercy of Maxwell. He informs the quack that Dale has diagnosed a number of workers in his factory with cancer, and suggests that Dale can provide Maxwell with the names. Perhaps the race to the rescue is also Maxwell's redemption. For a different account of how Maxwell gets this list see "The Reward of Courage," *Educational Film Magazine* 6, 6 (December 1921): 11.

⁵⁴ Everett S. Lain (Oklahoma State Director American Society for the Control of Cancer), "Cancer, A Neglected Subject," *Journal of the Oklahoma State Medical Association* 15 (1922): 236–37, p. 236.

⁵⁵ Tichenor's educationals sometimes employed titles of entertainment films, perhaps as tool for attracting audiences. See Cantor, "Between Movies, Markets, and Medicine."

⁵⁶ This point is developed further in Cantor, "Uncertain Enthusiasm."

⁵⁷ Osborne to Richardson, July 29, 1921.

⁵⁸ One report noted that Dr. Robert B. Greenough, director of the Harvard Cancer Commission and a founding member of the ASCC, assisted in directing part of the film. It is unknown which part. "Consolidated Report of the President and Executive Committee," [3].

⁵⁹ The animated sequences were prepared from material supplied by Francis Carter Wood, the director of the Crocker Institute for Cancer Research at Columbia University and a founding member of the ASCC "Consolidated Report of the President and Executive Committee," [3].

⁶⁰ Kirsten Ostherr, "Medical Education through Film: Animating Anatomy at the American College of Surgeons and Eastman Kodak." In *Learning with the Lights Off*, 182.

⁶¹ "The Reward of Courage," *Campaign Notes. American Society for the Control of Cancer* 4, 2 (February 1922): [1].

⁶² "The Reward of Courage." The film was sold at a cost of \$85 f.o.b. New York. The ASCC had three copies for loan purposes.

⁶³ In addition to the above references there is no mention of the film in a local Rhode Island report of the Cancer Week, "R.I. Branch American Society for the Control of Cancer," *The Rhode Island Medical Journal* 4, 12 (December 1921): 163–64.

⁶⁴ "Will Show Cancer Film," *Sun* (Baltimore), November 4, 1921, 9. "Doctors Urge City Hospital. Medical Society Also Sees Film Based On Cancer," *Sun* (Baltimore), November 5, 1921.

⁶⁵ "Reports on Three More States," *Campaign Notes. American Society for the Control of Cancer* 4, 6 (June 1922): [1–3], p. [1].

⁶⁶ "Washington's Belated Campaign" *Campaign Notes. American Society for the Control of Cancer* 4, 6 (June 1922): [3].

⁶⁷ Haecker, "Report. Division of Education and Publicity," 57.

⁶⁸ Osborne reported in 1923 that the ASCC originally supplied one copy of the film to each of the Society's 10 Regional Directors and kept two at the office for loan purposes. In addition, 22 others were ordered and paid for by State Departments of Health, members of the Society's committees, and other interested persons and agencies. This made a total of 34 copies of the film in circulation, and the Society later had two other copies made, one for the American College of Surgeons and another for ASCC headquarters, the last to meet growing demand for loans of the film. Osborne also noted that the ASCC should supply a copy to Canada. F.J. Osborne to W.S. Richardson, January 25, 1923.

⁶⁹ "Gleanings from Cancer Week," *Campaign Notes. American Society for the Control of Cancer* 3, 12 (December 1921): [1–4], pp.[1–2]. The absence of any mention of the use of motion pictures during the Cancer Week refers to the introduction to several reports from the states about the week, and suggests that film did not live up to expectations for those who compiled this report for head office. However, it should also be noted that the film is mentioned in some of the reports from the states, suggesting that state organizers were equally disenchanted with movies. See also Table 2.

⁷⁰ The journalist H.L. Mencken distributed a letter (instructing the public about cancer) to be read in all churches and synagogues in Baltimore during Cancer Week, "Maryland Committee Letter," *Campaign Notes. American Society for the Control of Cancer* 3, 12 (December 1921): [4].

⁷¹ "City Cancer Week Aroused Citizens to Need of Care," *Denver Post*, November 15, 1921, 3. col. 2. The figures here are slightly different from those in table 2, which suggests that 208,000 saw the slides. The 3,000 figure for seeing the film is a puzzle. If this refers to all 28 screenings of the film in Colorado (table 2) then this was an average of 107 people per showing, a very small number given that the Auditorium theatre could hold over 3,000 people at one sitting. Perhaps the 3,000 figure refers to only one screening of the film. However, even if all Colorado showings were in the Auditorium, and the Auditorium was full to capacity with each screening, the numbers viewing the film at all 28 events in Colorado would still come to no more than 84,000. The Auditorium was the largest capacity theater in the state. It is unlikely that all screenings were there, so the 84,000 is probably an overestimate.

⁷² F.J. Osborne, "Suggested Plans for National Cancer Week. November 12–18, 1922," *International Journal of Surgery (Advertising Section)* 35, 9 (September 1922): 20–28, p.20.

⁷³ In Worcester, Massachusetts (February 24): "Cancer Day," *Boston Medical and Surgical Journal* 186 (1922): 405. Spokane, Washington (July 5): "Business Meeting of the Pacific North-west Medical Association," *Medical Sentinel* 30 (1922): 407–8, p. 408. Wallace, Idaho (July 11): "Entertainment," *Medical Sentinel* 30 (1922): 412–13, p. 412.

⁷⁴ "Some Unique Publicity Methods."

⁷⁵ Edward H. Risley, "The Cancer Control Problem," *Journal of the Maine Medical Association* 13, 9 (April 1923): 217-29, p. 221.

⁷⁶ J. Louis Ransohoff, "Report of Cancer Council," *Cincinnati Medical Journal* 4 (1923/1924): 337-38, p. 328.

⁷⁷ "Campaign Suggestions," *Campaign Notes of the American Society for the Control of Cancer* 5, 8 (August 1923): [1–4], p. [3].

⁷⁸ "Washington Conference," *Campaign Notes. American Society for the Control of Cancer* 4, 5 (May 1922): [2–4], at p. [4].

⁷⁹ "Activities in Canada," *Campaign Notes of the American Society for the Control of Cancer* 4, 9 (September 1922): [3–4].

⁸⁰ "Publicity by News Weeklies," *Campaign Notes of the American Society for the Control of Cancer* 4, 11 (November 1922): [2].

⁸¹ “Final Cancer Week Reports,” *Campaign Notes of the American Society for the Control of Cancer* 5, 6 (June 1923): [4].

⁸² Cantor, “Uncertain Enthusiasm.” Cantor, “Choosing to Live.” On Eastern’s involvement with this film see Metropolitan Life Insurance Company, Welfare Division, *National Health Council. Film List Including Information on Visual Aids and Their Producers and Distributors*, Fifth Edition (New York: Prepared and printed by Welfare Division, Metropolitan Life Insurance Company, 1928): 44.

⁸³ “By the Way,” *Campaign Notes of the American Association for the Control of Cancer* 11, 9 (September 1929): 7. “Booklet Trailer,” *Campaign Notes of the American Association for the Control of Cancer* 11, 9 (September 1929): 6. On the background to this film see Ella Hoffman Rigney, “Cancer Publicity — Ten Years of Growth,” *Quarterly Review* (New York City Cancer Committee) 1, 3 (October 1936): 42–52, esp. pp. 46–47. The cartoons were produced by the illustrator Francis Rigney, Ella’s husband. On Rigney see “Francis Rigney is Dead,” *New York Times*, April 21, 1962, 17. See also Chuck Romano, “The Art of Deception or the Magical Affinity Between Conjuring and Art,” *The Linking Ring* (September 1995): 75–78. Chuck Romano, *The Art of Deception, or, The Affinity Between Conjuring and Art* (South Elgin, IL: C.J. Romano, 1997).

⁸⁴ When Colorlab inspected the Library of Congress’s copy of the nitrate film it found a date code that was used in films made in 1925, 1936, 1947 (date codes were reused periodically). This date code is probably why the Library of Congress originally dated the film in MAVIS as 1925. Colorlab also found that the main title might have been added later — the film stock is date-coded for 1941, 1961, or 1981, raising the possibility that the film might still have been in use after the 1930s. Colorlab, “Inspection Report: The Reward of Courage,” Work Order: 40109, August 6, 2006. The 1925 date has now disappeared from MAVIS, where the film is now listed as 1921. MAVIS (Merged AudioVisual Information System) is an online database containing specialized inventory and tracking records for certain of the Motion Picture, Broadcasting, and Recorded Sound Division of the Library of Congress’ nitrate, safety, video, and paper holdings. At the time of my research, MAVIS was accessible only in the Motion Picture and Television Reading Room reading room. On the prints before 1923 see Osborne to Richardson, January 25, 1923.

⁸⁵ See for example, “Motion Picture Films in the Loan Library of Illinois Department of Public Health, Springfield Ill.,” *Illinois Health News* 14, 2 (February 1928): 61–63, p. 62. M.C. Haecker (Director, Division of Education and Publicity), “Biennial Report. Division of Education and Publicity, 1926–1928.” In *Eighth Biennial Report of the South Dakota State Board of Health* (July 1, 1926–June 30, 1928): 46–50, p. 47. The Division of Education and Publicity is not mentioned in Biennial reports of South Dakota after 1928, nor is the film *The Reward of Courage*.

⁸⁶ As noted above, the date code on the film suggested a 1925 print. Colorlab, "Inspection Report."

⁸⁷ Roger Smither, ed., and Catherine A. Surowiec, assoc. ed., *This Film is Dangerous: A Celebration of Nitrate Film* (Brussels: Fédération Internationale des Archives du Film, 2002).

⁸⁸ Patrick Loughney, "The American Moving Image Diaspora: The Archeology of US Movies in International Archives," *American Studies International* 42, 2/3 (June-October, 2004): 149–56. See also Smither and Surowiec, *This Film is Dangerous*.

⁸⁹ Colorlab, "Inspection Report."

⁹⁰ More generally on music and sound in silent films see Rick Altman, *Silent Film Sound* (New York: Columbia University Press, 2004).

⁹¹ Prior to recording the sound track for *The Reward of Courage*, Maurice Saylor and the Snark Ensemble had composed and recorded soundtracks for DVD collections of early silent movie stars including Harry Langdon and Charley Chase. *The Harry Langdon Collection: Lost and Found* (Alexandria, VA: Allday Entertainment, 2007). *Becoming Charley Chase* (Alexandria, VA: Allday Entertainment, 2009). See also, Maurice Saylor, *The Hunting of the Snark. An Agony in Eight Fits* (Hong Kong: Naxos, 2011).

⁹² Colorlab, "Inspection Report." Colorlab, "Tint Log: The Rewards [sic] of Courage," Work Order: 40109, September 13, 2006.

⁹³ Colorlab, "Inspection Report."

⁹⁴ The precise figure for preserving the nitrate film, making a safety film, video, and DVD copies was \$6,896.90. This figure is not excessive compared to other film preservation projects. NLM's experience has been that, in 2012, a routine film-to-film transfer — the best form of preservation — costs on average about five thousand dollars, and is determined by the length of the film. However, older film, especially nitrate film, usually needs additional preservation work, which raises the price considerably. Film-to-video transfer is considerably less expensive, but only when the original is in good shape, which is not often the case.

⁹⁵ Most databases of public health education films tend to include films that existed in library and other collections at the time the database was created. They generally do not include films that have not survived, or include only a selection of these.