

Kattelle Oral History, Tape 4

August 19, 2003

Andrea McCarty: So Alan, you were saying?

Alan Kattelle: I think perhaps some of the reason for the lack of commercial success for the Edison Home Kinetoscope may have been the fact that there were quite a few adjustments that had to be made, and all in the proper sequence. The lamp house had to be set correctly for either film or lantern slides. The film transport mechanism had to be shifted in the proper sequence. There were two lenses: one for film and one for slides, and you had to get the correct one. Also, you had to put in the correct lens for the distance you expected—the size of the room you were in.

AM: All of which probably came naturally for Edison but not necessarily to somebody unfamiliar with the technology.

AK: Exactly.

AM: Okay Alan, what do we have now?

AK: We have here the 1902 Vitak, and this machine was designed by Enoch J. Rector, a very accomplished camera designer. He

designed the Veriscope camera and projector system for professional films, and in 1902 he introduced this for amateur use, taking 11mm film with a center perforation.

AM: Do we have any examples of the film here?

AK: Unfortunately I do not. I was sent a short sample from the [George] Eastman House and it got lost somehow.

AM: Tell me, with the center perforation, did it resemble 9.5mm, only it was a little bit bigger?

AK: It was oblong. Rectangular oblong. 9.5mm is that also—I've forgotten now. It did resemble it very much. In fact, for a long time I thought the machine was for 9.5mm.

AM: So probably the image was a little bit more rectangular, and the sprocket I wonder—do you know how big it was? I'm just wondering if you remember the film as having a large space between each frame with a fairly straight sprocket, or was it just...

AK: Well you can get an idea from the pull-down mechanism. The tongue is quite narrow. There's no sprocket.

AM: Oh, I see it. It's just a really little pin.

AK: A little tongue that goes into the—that's right.

AM: Yeah, I see. So, we see how it worked. Now, who was producing the film for this projector?

AK: Rector. He was making reduction prints from his commercial movies. The illumination was a carbide lamp, somewhat similar to this. This is the original. This is a metal tube. But this snout,

as they call it, and it occurs in many projectors— the snout is cardboard, so it's miraculous that it has survived.

AM: Oh wow. Can you tap the tube and then tap the cardboard. Okay. That gives people who can't touch it a better sense.

AK: Yeah. May I tell how I acquired this?

AM: One thing first-- I saw you loading some film onto it. Tell me where...

AK: Unfortunately, all I was doing was loading the empty reel.

AM: Right. But we can see where the film was loaded.

AK: And it probably collected in a bag at the end of the table. That was a common—

AM: Or a basket?

AK: A basket, yes. Put the projector over the edge of the table, and then the film went into a basket.

AM: Yes, do tell me how you acquired it. I'm curious.

AK: Alright. On a visit to Northeast Historic Film, after we had chatted with Karan Sheldon for a while she said, "Alan, I had a call the other day from a lady who offered me a Vitak projector. Does that mean anything to you? I told her we weren't interested." And I said, "Well, I'm interested. The 1902 Vitak was one of the first home movie machines. 1902 is quite early. So I'd like to know more about it." She said, "Well, I'll give you the lady's phone number." So, I called her and she said yes, she had it, and it was for sale. And she directed me. And it was not too far from Bucksport, but it was— I was led off Route 1 onto a side road, then I was to take the next left which was no

longer a paved road, but a dirt road through the forest. And at the end of that road I came to this obvious farm; there were sheep, cattle, hens and chickens. And the man of the house was building a garage. So I inquired about the Vitak and they dug it out. And I was just so thrilled because I had read of it many times and had never seen one. They unfortunately couldn't tell me—it had belonged to a relative, a deceased relative, and that's all they knew about it. But, since then—

AM: Were there any films with the projector?

AK: No. There were no films. There was no lamp either, and there was no stand. Interestingly enough, there's an antique store in Maynard that specializes in lamps, so I was able to find a similar one. As I told Karan, when she offered me the Vitak, I said, "I've never seen one, but it's like you said "pterodactyl." Right away you know what a pterodactyl looks like. You never saw one." [Chuckles] That's the way I thought about the Vitak.

AM: Well it's a pretty unique looking piece.

AK: Yes it is. And 11mm is an unusual gauge too.

AM: Can you tell me a little bit more off the top of your head about Rector?

AK: About Enoch Rector?

AM: Yes. That's a name that I recognize.

AK: Yes. I think he was a producer as well as a filmmaker, it seems to me. The name has a famous ring. That's all I can tell you at the moment.

AM: Do you know anything about how he became interested in making a projector for the amateur film market? Or why he chose 11mm? Do you know anything about that?

AK: No, I'm sorry I don't. That's a good question why he wouldn't have taken—well of course there wasn't any 9.5mm in 1902, so I just...

AM: So why not 11mm?

AK: Why not 11mm, yeah.

AM: And a center perf makes sense, so why not?

AK: Also, if you think about it, he could get three strips of film out of his 35mm stock, so that might have entered into the equation too.

AM: Do you think that he met with any success?

AK: I can only say that it probably did not provide a very bright image. I doubt if very many were made, and generally the snout is missing or torn, being cardboard. I doubt if there was commercial success.

AM: Okay. Here we go. What do we have there, Alan?

AK: Well, somewhere around 1920, a German immigrant named Herman Schlicker devised a new revolutionary film projector and camera system, and got patents on it. And somehow, the patent came to the attention of Mr. Freuler, who was a movie executive at that time. Perhaps best known as he was the one who gave Charlie Chaplin his first million dollar contract. Anyway, Mr. Freuler—

AM: The Mutual Film Company.

AK: Yes. He was president of the Mutual Film Company. And he caused a sensation when he gave Chaplin that then fabulous contract. Mr. Freuler found out about Schlicker's invention and thought it had possibilities, and bought the rights, and employed Schlicker to help him build the necessary equipment.

AM: Okay, more about Schlicker. What exactly did he invent? What is this machine?

AK: This machine is a device—we have to start with the film I would say. It's a device for taking pictures. No, this is the device for showing them. Now mind you, this is 1920. 16mm hasn't appeared as yet. So, Schlicker and Freuler were looking for economies for the amateurs, and they devised this system built around this endless belt of film that carried 1,660 images in a slow spiral around this loop of film. [Note: This is the Vitalux system].

AM: Alan, for 1,660 frames, how long would that run for? And could you run it all at once?

AK: If it was projected at sixteen frames a second, it would be convenient to say about a hundred seconds. Is that right? [Chuckles] I think it was more like about three minutes.

AM: Three minutes for that roll? [Laughs] Wow, that's not a whole lot.

AK: Not a whole lot. Shall we go to the camera?

AM: Let's talk a little bit more about the projector.

AK: Alright. It's a marvelous piece of engineering. May I open it up? As you can see, from the way the images are arranged on this film, the camera shutter and lens would have to move down as the machine was cranked.

AM: Why don't we turn it around so the people can see that mechanism.

AK: [Repositioning the projector] Here's the mechanism in operation. Now you see the shutter is working, and there is also a gear that is moving this shutter assembly down to the bottom. See this shaft moving here?

AM: Where is—I don't see anything moving down to the bottom. Is it just moving very slowly?

AK: It's moving very slowly. [Chuckles] [Cranking projector]

AM: And this being what's moving. No, what's moving? I'm looking at the wrong thing.

[Tape paused]

AM: So Alan, you were saying that the whole shutter mechanism is moving up the projector very slowly. Let me see you wind it one more time.

AK: [Cranking projector] And a nice touch that the engineers put in was when you reach the top--you had to go back down— but it automatically, when you reached the top, it went into a high-speed mode and went down faster than it came up, just to save you the cranking. [Cranking projector] I'm not sure that I can get the speed there.

AM: So the film was going through the projector in a very slow spiral. Was it going down or up? Did it start at the top or the bottom?

AK: Well, I would say that it looks like it starts at the bottom. There's some evidence that the operator, when he was showing this film, stopped cranking from time to time and that's what these blisters are. [Chuckles]

AM: And it looks like often in the same place.

AK: Yeah. That's curious. Are we ready for the camera, or--?

AM: So you're going around in a spiral, bottom to top. How did you get the film off when you got to the end? Was it easy to release?

AK: Yeah. It comes off very easily. I also forgot to mention that the lamp, which goes inside here, also had to be moving up to follow the lens.

AM: And that's when you said that you would take the film off and then you would need to crank it down again to start another reel. Yeah, let's look at the camera. [Retrieving camera] Okay, this is the Vitalux camera.

AK: Right. And it was loaded with film magazines. Here is the film magazine. There we see the film.

AM: Can you also hold the box out so I can take a look at it? Let's move the box now so we can get a better look at the camera.

AK: [Setting up camera]

[Tape turned off]

AK: Here we have the Vitalux camera, which took a magazine holding this film.

AM: Hold the film up so that people can see that it's the same film from before. And let's see the magazine.

AK: Here's the magazine and you can see the end of the film. And now, when the magazine is inserted in the camera, a tongue or arm pressed into this slot and exposed the film.

AM: And then the sprockets engaged.

AK: And then the sprockets took over and advanced it.

AM: Why don't you show us the camera, so people can see where the lens is and where the crank is.

AK: This is the crank back here, and—

AM: That's where the magazine is inserted, right there?

AK: Yeah. It would be nice if I could find the lens opening. Oh, here we are. I guarantee that you did not hand-hold this camera.

AM: How heavy is it? An estimate. It's not light.

AK: Ten pounds? And actually, there's a wonderful picture which Mr. Freuler's granddaughter kindly sent me. It's Mr. Freuler filming his granddaughter in a baby carriage, and he's turning the crank on the camera.

AM: Oh, that's excellent. So, let's hear some more about the history of the Vitalux. You had Schlicker and Freuler—

AK: Schlicker had the patents, Freuler had the money, And they combined to produce the Vitalux Company. They came on the market in late 1922 and, of course, a few months later, George

Eastman introduced 16mm film. Vastly simpler to use, inexpensive and lightweight, and in no time at all Vitalux closed out of business.

AM: Did either Freuler or Schlicker ever go on to develop anything else?

AK: Not that I have heard of. I don't know whatever happened to poor Schlicker. Freuler, of course, went on to successes in commercial film.

AM: Tell me about— you mentioned Freuler's granddaughter. How did you meet her?

AK: That's a good question. Lost in the mists of time, I'm afraid. How I ever managed to locate her, I don't know.

AM: But you did, and see—

AK: I did, and I told her I was writing a book and was going to write the story of the Vitalux. And she was interested in that and kindly sent me that lovely photograph that you can see in the book.

AM: So she knew about the Vitalux. Did she have any information that helped you?

AK: Not a bit. She doesn't have a camera or a projector.

AM: No idea as to how Schlicker came up with this? It's really complicated.

AK: I told you all I know about Schlicker.

AM: Okay. Where did you get it? How did you come across this camera?

AK: I got it through a peculiar set of circumstances. There was a well-known dealer in Chicago named Barney Copeland. Everybody in the camera trade knew Barney Copeland. He and his wife were good people, and they were successful dealers. And Barney had offered the camera and projector to Jack Naylor whom, as we may have mentioned, is this very well-to-do camera collector, who for some reason, refused to pay Barney his asking price for the Vitalux. And I decided that it was rare enough that I had to have it, so I bought it from Barney Copeland. That's how I got it.

AM: Have you ever seen another?

AK: No. I have a good friend in Europe who has one. Unfortunately, we're missing the lens I believe.

AM: So Schlicker came over here from Europe.

AK: From Germany.

AM: From Germany. So was this a camera that was mostly marketed in the United States?

AK: I have to say it—there's one in Europe, so how it got to Europe is hard to say.

AM: But it was probably primarily on the market here?

AK: In the United States, yes.

AM: And are there ads for it in some of the early trade magazines?

AK: I don't believe that I've ever seen—no, I should take that back Andrea.

AM: It would be interesting. Clearly they only had a short time to market the camera before it became clear that 16mm was going

to be the next thing. And I'd be curious to see how, you know, how they decided to do it.

AK: Well let's just hold on a second.

[Tape turned off]

AM: Okay Alan, you were showing me a picture of Vitalux literature.

AK: Yes. This is a Vitalux promotional—

AM: Can you hold it up just a little bit more? This is from the Vitalux literature?

AK: Yes. Actually it's a copy of their instruction book.

AM: Okay. I see. Can I see the front picture again? Alan, I'm noticing that the images behind the camera in the picture don't look very home-movie like. They look like Hollywood films.

AK: Well, I would suppose that Freuler being, you know, a Hollywood man, even though his company was located in Milwaukee I think, he was very much a professional producer of professional films. And I think he wanted to give the Vitalux the aura of being practically of professional grade.

AM: Right. So were there any films available, production films available?

AK: Absolutely. Here we have a Vitalux package, which one could presumably purchase. And if you can read the titles—

AM: Okay, we have the *U. S. Naval Academy*, *Boy Scouts of America*, *All Aboard* Parts I, II and III, Douglas Fairbanks in *Hawaiian Blues*, I'm assuming. And we also have *The Hickhunter* and *Sweet Revenge* Parts I and II.

AK: And on this side it says, "Vitalux are perforated and inspected by experts. But in supplying them to the trade, we assume no responsibility for perforations."

AM: So they're saying once you put that film through the projector, they're not responsible for how it responds, or--?

AK: [Chuckles] "Film productions will not be sent out on approval or exchange."

AM: Sent out on approval or exchange? That means they're not going to loan them out to you.

AK: That's right. You can't borrow them and send them back, and you can't exchange one for another.

AM: Do you think that they ever got around to producing equipment to repair them? You know, splices, or how to repair the perfs, or--?

AK: I've never seen any if they did.

AM: Clearly, the splice would be very big in that film, but mostly the perfs [would need repair] because it looks like the roll that you have has damaged perfs.

AK: Right. And it's quite obvious that none of these are amateur. These are all commercially shot films right?

AM: Yeah. So they had commercial films available, and you could shoot your own. Do you know who did the processing of the amateur films shot on Vitalux?

AK: I wonder if this would tell us. Oh, the customer apparently was expected to develop his own film because this instruction book says, "In case you do not care to develop and print your films,

bring them to your photograph dealer. If he is not equipped to do this work, send films to the Vitalux Laboratories by parcel post. All orders will receive immediate attention and will return in a minimum number of days.

They pointed out that the Vitalux projector uses only safety standard special tubular film approved by the Underwriter's Laboratory. Also, by State and Municipal for use anywhere without restrictions.

AM: Anything else interesting about the Vitalux, or should we move on?

AK: I think we probably said all we can about the Vitalux, except, of course, that the timing was terrible. 16mm came along and just knocked this out of the market.

[Tape turned off]

AM: Alright Alan, what do we have now?

AK: Well, in 1931, an inventor named Clarence Ogden introduced a revolutionary new system of camera and projector. It was called the Kemco HoMovie System. Ogden's objective with his new system was to save the amateur money by putting four images in each 16mm frame.

AM: And how would he do that? Can you demonstrate with your hands how?

AK: Yes. He would—if you visualize the 16mm frame, he arranged the camera so that it took picture number one here, moved over—each image being a quarter of the 16mm frame. Number one, number two, number three, number four and so on, like that.

[The mechanism moves from left to right, down, and then from right to left.] If you can visualize the pattern of-- a Kodak engineer gave me a beautiful name for that pattern; It's called boustrophedonic. The Greek word for how the ox plows. That's the way it would plow a field. And, here's the camera which we shall open. [Opening camera] It's in Bakelite, which is always nice.

[Preparing camera for operation] [Camera running] I hope you can see that the shutter is going back and forth and advancing at the same time.

AM: Can we do that one more time, and maybe—I don't know if we'll be able to catch the motion on the back and forth clicking.

[Adjusting camera] Okay, if you put it on an angle maybe we can do it. Let's try it one more time. And let's go. Oh yeah, you can see now. Good.

AK: So, here we have the camera. It's not too bad, weight-wise. Three or four pounds perhaps. Ogden, being an engineer and an inventor, he did a good job. He gave instructions for operating the camera and the projector.

AM: So what we have right there is the camera. Do you have the projector?

AK: Yes we do. I was afraid of that. [Laughter]

AM: Here we have the Kemco HoMovie projector.

AK: And of course, it should be realized that the projector mechanism had to do exactly the same boustrophedonic pattern that the camera did. In other words, it had to shift sideways then down, then sideways back again. So it was quite

a complicated mechanism, but well-designed. I have a Kemco film. I've never quite had the nerve to try and project it. I didn't want to destroy it.

AM: That's understandable. Do you have it here?

AK: I can't put my hands on it, but I would point out that Ogden made a maintenance kit.

AM: Oh, excellent. So he had accessories. Contents: projection lens, reel, lens cleaning kit, a bottle of lubricating oil, wire oil dropper, oil can, cleaning brush, screwdriver. That's excellent. I'd like to talk to you a little bit more about the Kemco.

AK: Yes. It was another case—I'm sorry, I should let you ask the question.

AM: You know what I'm going to ask.

AK: It's another case of a brilliant idea and terrible timing. Because the Kemco came out in 1931 or late, even early 1932, and you know what else came out in 1932 was 8mm, which accomplished the same result at half the cost.

AM: Did Ogden have the support, or did he need support from George Eastman and Kodak?

AK: I'm sure that Kodak— Eastman would have been glad to help him, because all along, Eastman Kodak realized that their bread and butter was film. So the more cameras out using film the better, as far as they were concerned. They didn't really

worry about competition camera-wise, because that wasn't really their bread and butter, particularly in that era.

AM: So, the Kemco HoMovie camera used the exact same film, was using the same frame line—

AK: Exactly. They didn't have to have special film. It was just straight 16mm film.

AM: Where was Ogden based out of?

AK: Cincinnati. His company's name was Kodak. I think you picked that up—

AM: [Reading] Yes. Kodak Electric and Manufacturing Company.

AK: Yeah. They manufactured electrical gear, including rectifiers, which were well thought of. Where did I get this? I believe this is the one from Australia, but I'm not quite sure.

AM: Oh, the one where you did a mail bid?

AK: Yes.

AM: Another question: Who processed this film? Would Kodak do it? Did you just process the--?

AK: You could send it to any Kodak processing station, yeah.

AM: So it would just show the four separate images. Do you think it met with any success before it was drummed out of the market by 8mm?

AK: Again, I have to say that these are very, very rare. I've only heard of one other outfit, camera and projector.

AM: Do you know whatever happened to Ogden?

AK: It says in the book. [Chuckles]

AM: Okay. We'll go to the book to find out. Maybe you could tell me in a nutshell, do you remember? Did he go on to do anything notable? Or was this the end of it? If you can't remember, that's alright.

AK: I'd like to look and see what it—may I?

AM: Okay. We'll pause and then we'll come back.

[Tape paused]

AM: Okay. So Ogden, he was a pretty active man?

AK: Clarence Ogden received many electrical patents between 1929 and 1932, one of which was for the Kuprox Rectifier, which was widely used as a DC source for radios in those days. The radios of those days took a large number of batteries for DC. The alternate for batteries was to have a rectifier.

AM: And for more information about Ogden, people should see your book.

AK: We're done.

[End of Tape 4, Side 1]

AM: Okay Alan, what do you have?

AK: I have here a very unusual amateur camera called the Movette, introduced in 1917 by a Rochester company. Unusual for several reasons. First of all was the peculiar film path.

AM: What's peculiar about the film path?

AK: Well you notice the camera is a conventional shape, but instead of being like so, it's like so. [The film path is at a right angle to the long side of the camera.]

AM: Which means that the film has to have a twist in it.

AK: Exactly. I'm sorry I didn't have a piece of film in there.

AM: That's okay. Why don't you hold it up so I can look at the film path reel? Can you straighten it out a little bit towards the camera? Actually there is a piece of film in there.

AK: And you see where the sight is. That was one unusual thing. The gauge of the film was also unusual; it was 17.5mm. And the film was supplied to the Movette Company by Eastman Kodak.

AM: Could you show me the film?

AK: I can't take it out. It's in the magazine.

AM: Oh no, I just want to see the box. And it's a magazine.

AK: Exactly. I don't like to unseal it.

AM: That's okay; you don't need to do that.

AK: You can see there's a metal magazine showing through. And that magazine dropped into place here. You pull the loop of film out to put into the film path.

AM: And the magazine sat where?

AK: The magazine sat right in here, like so. And the camera was hand cranked. So again, it would be very difficult to hand-hold. And you have on the bottom a tripod socket.

AM: Can you show me the crank?

AK: Yes. There's a crank in the back.

AM: So it would sit on the tripod.

AK: So it would be sitting on the tripod like so and you'd be cranking the film. As I say, the film was supplied by Eastman Kodak, and curiously enough, it was nitrate. It was 17.5mm nitrate film.

AM: Okay, here's a question. You were talking about the Edison Home Kinetoscope, where George Eastman said that he would only supply safety film for this 22mm format that was marketed for the home. Why was George Eastman inclined to provide nitrate for the [Movette] 17.5mm, which was clearly destined for the amateur movie market?

AK: Very nice leading question. The answer is that the flammable nitrate film was only going to be used in the camera where there was no danger of ignition. Because once the customer had exposed the magazine full of negative film—

AM: And did Eastman Kodak do this processing?

AK: Eastman processed it and printed it on safety film, which was then used in the projector. Besides that, the film was returned to the customer in this magazine. And this is a projector magazine. So you could shoot a roll of film, take it to the dealer, get it [processed] and printed, and you took in your magazine and he added that to whatever film you had in there already, until you'd filled it up. And then you had to buy another. But you've got a nice film load for your projector instead of just a short length.

AM: Can you open the magazine again so we can get a better look at what the film looks like? The sprockets look round. Are they?

AK: They are indeed. That's right. In fact, that's one of the things I mentioned in my lecture, that the round sprocket holes were a giveaway.

AM: Okay, so 17.5mm had round sprocket holes. You said that Movette was based in Rochester. And they had a collaborative relationship with Eastman Kodak.

AK: Obviously, they must have ironed this out with Kodak before they ever started manufacturing: "Will you be able to supply us with nitrate, and...?"

AM: Do you know anything more about the nature of the relationship? Was Movette eventually swallowed up by Kodak? Do you know anything about the history of the two companies?

AK: No. Of course, again, this system would be out-moded once 16mm came in, because you wouldn't have to go through the two sets of film. And the projector was curious. Shall I bring it?

AM: Okay. We have the Movette projector there?

AK: Yes, and this is incomplete. I've never seen a complete one. But this is the projector magazine that I showed you before, and it slips on to these. And obviously, it was a motor drive, and some sort of illumination source. Well no, I shouldn't say it was a motor drive. It was hand-cranked. Again, I believe a very limited market. These again are extremely rare, and of course with the advent of 16mm direct reversal, there wasn't any need for that double system.

AM: Do you want to turn it around so I can see inside the projector?

AK: This must have been kind of a nuisance. You had to pull a loop of film out of the magazine and spread it over those two sockets. That looks to me like a pretty awkward procedure.

AM: So what year did *Movette* come out with 17.5mm amateur film?

AK: It came out in 1917.

AM: So it had a good six years?

AK: It had six years to live, that's true. It has a well-done instruction book. It shows the procedure I mentioned of pulling the film out of the magazine, how to load it in the camera, how to put it on the tripod.

AM: Oh, is that the picture from the cover of your book? No it's not. Okay, I'm going to pause for a minute.

[Tape paused]

AK: I'd like to comment on the back of the [*Movette*] instruction book. This is the rear of the instruction book, urging you not to waste film. What's interesting about this to me, is that it almost says that people bought this camera and projector to make their own dramas, not [to film] Mary's tenth birthday party or the bar mitzvah, but to make dramas. Because here, they're pushing a hundred scenarios [for the amateur]. And that's not the first time I've seen that. In fact, in one of the earliest issues of *Movie Makers*, which was a journal of the [Amateur Cinema League], the movie society, they discussed at some length a play that a group of amateurs were making.

AM: Are you referring at all to the woman, and I think Dwight [Swanson] wrote an article about her, who had a connection to Eastman Kodak through one of the Rochester theatrical societies?

AK: Are you talking about--?

AM: I may have the name wrong.

AK: I think I know who you mean. She filmed a famous early 16mm movie called *A Birthday Party*. Is that the one you're thinking of?

AM: Right. Is that not the same woman?

AK: It's not Mildred Dawson, no.

AM: Okay, because I know that the woman that Dwight wrote the article about, and her name escapes me, also was writing scenarios for other amateur filmmakers to play around with—

AK: Exactly. I'll think of it, and her name is in the book. I think what we're seeing here is that today, when you say home movies, everybody thinks of family movies. And yet in the early days, I think the emphasis was on people doing dramas in the home. [Note: Alan and Andrea are trying to recall the name of Marion Norris Gleason. See Kattelle's *Home Movies*, p. 82.]

AM: And the emphasis was through Kodak, because I think Kodak is clearly pushing this, supporting local amateurs—

AK: Movie clubs. Right. And I think that they probably felt that people would get tired more quickly of the kids' birthdays than they would of these dramas, but that didn't turn to be. Long range, it wasn't true.

AM: I have a question. Kodak got together with Movette to make the 17.5mm format, or at least cooperated with Movette. What were their own engineers and designers doing at this time, running up to [the release of] 16mm in 1923?

AK: Well, the work on 16mm had actually started prior to World War I, and then was suspended because of the war time efforts. And it wasn't until after the armistice was signed that the design engineers went back on the 16mm project and brought that to completion in 1923.

AM: And so all this time they were thinking about amateur formats and were also thinking about amateur theatricals and movie clubs. Is there anything else you can think of about Movette? Was Movette around after the advent of 16mm?

AK: No. The Patent Department, Kodak's Patent Department, used to obtain every new competitor's movie cameras and projectors. They always took one in and ran it through the basics and wrote a report on it. I remember that it was a very poor report on the Movette projector.

AM: On the Movette 17.5mm? What were the [problems]?

AK: Just erratic performance and poor illumination.

AM: Do you think it did well in the market place?

AK: No, I don't.

AM: How do you know that?

AK: Again, I sound like a broken record, but you just don't see them. So what else could it say but that they didn't make many. That's all I can say.

AM: That makes sense to me.

AK: Although I happen to have three Movette cameras, I'm surprised. But I only have that one poor wreck of a projector.

AM: Where did you find the Movette cameras? Are they around?

AK: Yeah, they show up. They did. Not anymore, but they did show up at trade shows.

AM: Do you have anything else to add about Movette, or what Kodak was doing during the [war]?

AK: Were you recording what I said about the patent department? About them taking new cameras as they came in on the market and testing them?

AM: Right, and that they wrote a report. And Kodak was doing that for everybody, not just people they were in direct competition with.

AK: No, everybody.

AM: So they were doing that with 28mm and—?

AK: Yeah. Whether those records still exist or not, I don't know.

AM: How did you hear about the report on the Movette?

AK: I see papers about Kodak from the man who was in charge of the Patent Department, David Gibson.

AM: I'm out of tape. Hold on just one minute.

[End of Tape 4]