

Dr. JOHN HUBBARD INTERVIEWS BEN CULLEN IN THE 1970s

The Ben Cullen Interview is given courtesy of Shawn Montgomery www.zerozerotwo.org who transcribed it from the original recordings.

1. HUBBARD: Do you remember that picture of the spore? That is the one which is particularly important, and you were telling me the last time we talked that Rife had split a baby's hair in four parts, did he try to put the spore, the tetanus organism, in like this in the four parts?

CULLEN: You see what happened was this: first he took the hair and mounted it into a matrix, erect, to hold it straight. Then he mounted in a micro-dissector with a very fine, sharply honed blade. And he used a portion of a safety razor blade with which he had cut and honed it down very, very thin. To look at a razor blade ordinarily, it looks like this, even though it is a good edge to shave by. He had to have it so thin that it was almost so thin that he had to be careful not to move it either this way or that way or it would bend. Blown up on a microscope, that is, one of these reflectometers or something like that, it was a very, very rugged edge, but nevertheless, by moving it back and forth it cut down through.

First, he removed all the outside excess mounting wax that he had. And of course, you can call it a matrix if you wish, holding the hair, it was held in a special vice, a small vice and he came on down through, and sawed down until he got down to 1/4 of an inch of the hair cut down. And then he cut this through and removed that half, which then you have a half round condition for 1/4 of an inch. And then he turned that sideways and split that right down from the top to the area where it was cut away to make a half of a hair. Then he faired that off very carefully so as to have no sharp edges, and also, you know, in any machined condition, whether it's a hair or a piece of steel or anything else, you have to have a radius. And how he put that radius in was very, very interesting indeed. He contrived a very, very fine hair with some very extremely fine dust, which he called, let's see, it was something like "rouge," and he held this half-hair in the matrix. He worked this back and forth with a little reciprocating frame, like this, so that the hair with the impregnated, something like diamond, only he said it was a type of "rouge", gradually he was able to produce a radius right in at the cut of the hair. Then he feathered the entire balance of the hair off to a point so that there would not be a sharp sudden break-off. Then he turned the hair over, after of course he recovered it from the wax, and turned it over, and with some very fine pairs of tweezers. He used about a 12-power glass. He mounted that in a very small chuck, the type of chuck that you can twist to collapse the interior three gripping surfaces so he could get it into a center, something like the old-fashion carpenter's brace or any other type of drill-holding chuck, but it was very, very small. He did a splendid job on that.

I think he first tried Tobin bronze and he found it was too porous so he went to, he couldn't use titanium because he didn't have then the tools to work titanium. I think he was able to get, at that time, some annealed chrome molybdenum and he was able to use it so that he could make up a very fine chuck and so he turned it up in the lathe. He had a jeweler's lathe. In fact he had several lathes. And that little chuck was made up so that the hair could be entered in that chuck and closed up so as to hold it. Now the trick, of course, was to hold it so that the two pieces of the hair, as it was spread, as it was pushed down it would spread, and of course this is the top

side, the rounded side, this is the flat side under here [motioning]. And as it was pressed down, like this, it would open. Now the reason was because the hair naturally has some spring-back like any material, and he found that they were sufficient to bring about a gripping of these tetanus bacilli. He tried it with a hookworm bacillus first, and the hookworm, I know he laid a dozen of them in a row, and it was quite interesting, and then after that of course he was working with the tetanus bacillus. So that's what he did. In picking it up after he had put this down, first he had the thing mounted in a very fine multiple-leverage manipulator, in other words, by moving his main lever, it would be like a very, very fine vernier, he could move it with say a 1/2 inch and get just a couple of thousandths, or 1/2 a thousandths of movement on this little chuck here.

2. HUBBARD: (Laughs) Yes, OK.

CULLEN: And then he laid it down like this and opened it. And then he had a means of moving the whole framework like that to the bacillus, and then as he raised it up the two ends of the hair closed on the bacillus but there was insufficient power to crush it. It picked it up but it didn't crush it. Then of course by manipulating the whole thing it laid on a slide until he had enough of them on a slide, and then of course put it on the microscope and took his photographs.

3. HUBBARD: How much time was he working on this project?

CULLEN: You mean the entire project? He started when first I met him in 1913.

4. HUBBARD: No, just on this bacillus.

CULLEN: Oh the bacillus, oh, it took him a full ten days, because, for a long time he would say, "I've got to see the entire project in my mind first." So he would go to bed and leave a pad and pencil by his bed. He had an ability, which, you might understand, to call on the same as Beethoven did to get his music, from the other side. At eleven, twelve or one o'clock, he would wake up with some information and put it down. And by the end of about two or three days, he'd called me up and say, "Ben, I got a lot of information. Come over and see it." Of course, I always spent more time than I should have, because I always had to get up at six a.m. in the morning. I never got to bed here until about twelve or one a.m. in the morning. I lost a lot of sleep on that deal. You see he was on Point Loma and I live right out here. I've been out here for 46, 47 years now. Then so, I would go over and it mechanically looked very good. So then he started, and after he had it all fixed up, first there was a micro-dissector. He did another little trick too, he dissected, in fact he took a very small embryo that had been a miscarriage, and he cut it in very fine slices and was able to study so much, and that is another project. After he had them all laid out, there wasn't one of them that was mashed in any way, shape or form. Of course, at first, he tried different types of hairs and some of them were too powerful. Two quarters as they came together would take and squash the bacillus. Finally, he said, "I think if I can find a young lady, or a baby that had golden brown hair, I am told that that hair is quite tough and yet very springy and yet very fine." So it happened that my daughter Sylvia had that kind of hair. So I took some of it over to him and he used that. So after that of course, he was wrapped up more, not so much in his micro-manipulator as he was in the development of the

microscope and also development of some type of ray of very high frequency current which would annihilate any types of cancer virus in his work. And so, he worked a great deal on that.

5. HUBBARD: Did he ever make any other very thin sections like this section of the tetanus bacillus?

CULLEN: The hookworm and the embryo are the only other two that I remember.

6. HUBBARD: Do you recall how big this embryo was?

CULLEN: It was, I would say about 5 mm long and stretched out by 2 1/2mm, including the overall size of the body, 5 1/2 to 6 mm long. It was very small, in fact, he was so astounded that such a small embryo would be so perfect. The fingers were formed, and the whole thing. Quite often you find, in an embryo that's aborted, it would be Mongoloid for some little time. But this was perfectly formed. In fact there were stools in the bowels and food in the intestinal tract and the stomach.

7. HUBBARD: At 5 mm or 5 cm?

CULLEN: I guess I'm talking centimeters right now, yes, because it had to be big enough of course, to handle.

8. HUBBARD: This is 5 cm right here.

CULLEN: It would be about double that size. That 5 cm would be double the size of the baby.

9. HUBBARD: 2 1/2 cm.

CULLEN: Yes, I know because I saw it laying out there. My remembrance of measurements was not too bad. I used to have a great deal of work in fine-menturation in the factories.

10. HUBBARD: Do you remember what year; approximately it was that Rife cut the section of this tetanus spore?

CULLEN: It was 1928 or 1929, somewhere in that area.

11. HUBBARD: 1928 or 1929. He made this picture then, not with his big Universal microscope but with one of his earlier microscopes, didn't he?

CULLEN: Yes he did.

12. HUBBARD: Oh, well.

CULLEN: It was because that Universal microscope was magnified too large for anything like that. You see, he worked in an area the size of a pinhead, and that was large enough to have to play with when it came to the filterable forms. He used one of his earlier microscopes, he had several microscopes. He had one of course that magnified 5000 times and one that magnified 10,000 times. In fact he made several 10,000-magnification microscopes and one went to Dr. Patterson [Dr Parsons]. I think it was in England through the help of Henry Siner.

13. HUBBARD: Was it Patterson or?

CULLEN: I may be wrong. It was Dr. Gonin, who was the physician to the Queen at that time, and Dr. Patterson was in that deal and I can't recall other names too well.

14. HUBBARD: I see.

CULLEN: The difficulty is that they have all passed on in one way or another.

15. HUBBARD: Has Mr. Siner been out to see you recently? [Henry Siner was one of Rife's lab assistance]

CULLEN: I haven't seen Henry for quite a long time. He has been more wrapped up in high finance. He has been Chairman of the Board of the Siner Paint and Glass Co. and a couple of other activities. We have more or less separated because I remained, in his idea, just a little bit too much of a church-mouse to be bothered with.

16. HUBBARD: Well, they may not be quite accurate.

CULLEN: It may not. Henry is a very fine fellow. I liked Henry very much. I have known him of course for many years and during the last World War it was possible for me to turn a great deal of business to him through what we call outside production or outside order, materials for Convair. You see we had cost plus ten, which was of course, was a very, very easy way to do anything. We had lots of money. And I could suggest that much of the work that we were scrambling to get together could be produced outside. And Henry got many, many orders for all sorts of chromes and paints of every conceivable description. And as a consequence, Henry made quite a bit of money. And of course their glass company built rapidly after that and then he seemed to be spreading out, and of course had a large number of agencies established in the county and other counties. And then I lost contact with him.

17. HUBBARD: Well, coming back to the microscopes, this picture here is unusual in that now we have confirmation from the electron microscope. This picture here, the dimensions, you see the spacing between these lines here, this corresponds with our so-called "unit membrane," and there is space out here, this is the "nuclear membrane." Well the distances between these three components here, the distance between these, corresponds exactly with what we know since about 1950-60.

CULLEN: Between the lines?

18. HUBBARD: Yes, between the lines, you see.

CULLEN: What significance do you attach to that?

19. HUBBARD: Well, you see, the significance is that the methods, the instrument that produced this, was able to produce a resolution which we were not able to obtain except with an electron microscope many years later. Now then, I would like to see this microscope reconstructed, recovered, the principles of it determined, because we would probably be able to work with material that still has water in it. We could work with living material. Now we would still

have problems of sectioning. Notice that this typhoid bacillus here, this is complete, this is not sectioned. You cannot see as much detail in this as you can in this because this is a thin section. But this has resolution down in the neighborhood of about 20 angstroms, at least, and nobody had ever been able to do that until the electron microscope came along and until they had methods for making thin sections. Now this, Ben, is the Xeroxed copy of the article in the Smithsonian Institute Report. I had our photographer make a smooth glossy copy of it and this merely will show you what the legend was in the original and you can compare it. Well you see, all you have to do is a little arithmetic, the object size, or, the size of the specimen, times the magnification, is equal to the image size. So if we have the image size we can do the arithmetic and we can go back and figure out what the object size was. Now then, independently, we know what the diameter of tetanus spores are, from both the light microscope (the conventional light microscope), and from the electron microscope.

So by going back and checking the arithmetic from that source, we can confirm that this is the correct dimension. We also have, that is, we now know independently, the thickness of the spore wall here and the interior of the spore. We can compare this distance with this distance and we get a ratio, which is exactly comparable to what we know from modern electron microscopy. I know that this microscope, even though I've got only three pictures to look at, and only this one can I make correct measurements from, I know that this was an extraordinary microscope and I want to get it rebuilt. I have known about this microscope since 1947. I found this report in the Smithsonian Institute report and I wrote to Rife back in 1949 but he never answered me. I kept asking and sending letters and so forth.

CULLEN: At that time, it was just exactly ten years from the time he started drinking and he was mentally pretty well in shock. I couldn't get him to do hardly anything. I tried to get him to provide us with closed-circuit television in Lion Aeronautical. I tried to get him to provide us with information and help in our laboratories over at Convair in regard to metallic crystallography and stuff of that sort. And he could have made a lot of money that way. But every time I got him closeted with a group of engineers and he would start to outline his thoughts and what he could do and they were all sitting on tender hooks, he would excuse himself and go outside. By the time he got back he would be waddling. He had to have that liquor, which of course was the fault of the advice and counsel he received in 1939 during the final windup of our case where we were accused by the AMA of doing something they did not like in regard to the application of the Rife ray for cancer and so forth. And of course that was all a mistake. Of course they had the right kind of help, medical men of repute. But by that time when Rife came on the stage and on the witness stand to testify he went all to pieces.

20. HUBBARD: And this was in 1939?

CULLEN: Yes.

21. HUBBARD: Now, I went down to the courthouse and copied all of the records on that trial and I read them on the projection machine, they have them on microfilm down there, and I was just surprised. There would be times when they would want Rife to come to court and from the record there, he wouldn't show up.

CULLEN: No he wouldn't.

22. HUBBARD: Was that because he would be drunk, or what?

CULLEN: No it wasn't. Rife was a tremendously capable man as long as he could manipulate what he was working with. When it came to being in a court of law where you're right down to dog-eat-dog, why, that just unnerved him and he couldn't stand it.

23. HUBBARD: What kind of questions would they ask him that would unnerve him?

CULLEN: It wasn't that any questions would be asked to unnerve him, but here he was a man who had spent his lifetime in doing things that others had told him were wonderful, just simply marvelous, his lenses and stethoscope, and his guns, so many, many things that he did. All this he was told by many men from England and from Germany and other places that he was an excellent man in his field. Possibly I am not using the correct nomenclature and verbiage that I should use, but nevertheless, he absolutely felt on top. And when he got into court he became a simple, plain human being. And anything he might say he was afraid might incriminate him, although there was nothing at all that the trial could find that he would be at any time considered culpable in any mistake at all or anything that might have been done. It was all done of course through our corporation: The Beam Rays Corporation. Now, Rife felt completely frustrated because he could not do anything in court except say "yes" or "no," and he knew what to say and he was not allowed to say it. If he was allowed to enlarge the least little bit, why, the Prosecution would cut him right off and there would be a fight as to whether it should be entered in the record or stricken from the record or what. It so unnerved him that he was just simply scared to death. He was not at all conversant with law. The only law he knew was the law of research and investigation.

24. HUBBARD: Was there a transcript of this trial ever made, a typed transcript of the testimony in the Judge's chamber?

CULLEN: I wouldn't be able to tell you that. Bert Comparet would be the man to tell you that. Do you know who he is? He was our attorney at that time. Let me see if I can get his telephone number.

25. HUBBARD: All right, thank you.

CULLEN: His telephone number is 284-2666, and the address is 4930 Mansfield, and his name is spelled C-o-m-p-a-r-e-t, B-e-r-t-r-a-n-d. He is of French extraction.

26. HUBBARD: He was the attorney for Rife?

CULLEN: Yep, and for all of us. Actually we hired him. Rife you see wasn't accused of anything. He wasn't indicted. He wasn't anything. He simply was a witness and in spite of the fact that they had nothing against him and never did find anything against him, he simply went to pieces.

27. HUBBARD: That is very, very strange. How old was Rife when his father died?

CULLEN: Strange as it may seem I have no knowledge of that.

28. HUBBARD: Did he ever speak of his father?

CULLEN: He never spoke of his father in the whole time I had known him from 1913 until 1950.

29. HUBBARD: That's very strange. But he did speak of his mother quite a bit didn't he?

CULLEN: Not to me. You see he was married to a very lovely Chinese woman, her name was Mamie. She was a member of the Ah Quin family here. She was a very splendid person and of course I am rather partial to Chinese. At one time I must have been Chinese. Perhaps you don't believe in reincarnation, I don't know what your ideas are.

30. HUBBARD: I don't have any really. But go ahead.

CULLEN: And so Mamie was a very fine person and everybody just loved her and he always spoke very highly of her. But I never heard him talk of his mother or father in the whole time. And we were together an awful lot, goodness; we were together often time's week after week. Every night after I would get away from my work here at the house, first I would come in from factory and then after I did what I could do around the house I always slipped in to do what could be done at the lab. In fact my wife often claimed that she was more a widow than she was married. We were together so much and in that whole time I don't recall that he ever once mentioned his father or mother.

31. HUBBARD: Did you ever hear him speak anything about his boyhood? Did he ever talk about any of the friends that he had or any fights or any athletics or anything like that?

CULLEN: Very little. He was so much more interested in optics and also to get all he could in optics he studied all he could from the Chinese development in optics, plus Zeiss in Westlar, Germany and others. Carl Zeiss.

32. HUBBARD: But Carl Zeiss was not at Westlar, that was Ernst Leitz at Westlar, Carl Zeiss was at Jenna.

CULLEN: That is strange because all was referred to Zeiss as being in Westlar. However, I saw much information, much correspondence from both places.

33. HUBBARD: From both places. Did he ever mention the name Hans Lukal to you?

CULLEN: Yes he did.

34. HUBBARD: And this was one of the people that he studied with?

CULLEN: Yes.

35. HUBBARD: Do you remember if this man was at Zeiss or was at Leitz?

CULLEN: I understood he was at Leitz.

36. HUBBARD: Do you remember the optics which the microscope objectives which Rife used? Did he use both Leitz optics and Zeiss optics? Or did he only Leitz optics?

CULLEN: As far as I could find, he used only Zeiss in this Universal Microscope. Now I'm not going to say he used only Zeiss completely because he ground many of his own lenses. He developed a system of grinding his own lenses and I watched him do it. He mounted them, of course, in this 21-bend microscope, which is his Universal. I was hoping to work with John Crane who has the microscope skeleton now, and have him let me have it.

37. HUBBARD: Have you talked with him?

CULLEN: I have talked with him a great deal.

38. HUBBARD: What does he say?

CULLEN: Well at first about a few weeks ago he said he would let me have it and I would polish it up and get it in shape. And then I said, "I would like to have you plan to have it exhibited in the Hall of Sciences." He said he thought of that too. Then he casually mentioned that he was going over to Japan and today is the 20th and I expect he has been over there now for about ten days.

49. HUBBARD: Oh, he did go to Japan then?

CULLEN: Yep, and I haven't tried to find out whether he is home or not to check up on it. I could, of course.

40. HUBBARD: Well I'll call him Ben, that's all right, just go ahead, but he was going to Japan?

CULLEN: Yes to finance one or two of his items. He (Crane) has a type of microscope that he invented himself. It's a rough and ready looking thing to me. But he can throw, of course, on to a screen, a magnification of up to over 400,000 times. But then the resolution is not good. And he says he is going to improve it. Now, he is quite jealous. When I went over the last time, he said, "Yes, I will let you have it." Now, I called him on the phone and I told him I was about to have our biggest car, which is an Impala, overhauled, and it would be tied up for some time. But before I did, I could come over and pick it up because it had ample room in the trunk to bring it over here. He said, "I'm not going to let you have it, I won't be doing anything about it until I get back from Japan." I said, "When do you expect to get back?" He said, "I don't know." So that was the way we left it. I just simply felt, well, there is nothing that I could help anybody with as long as I can't get the microscope because I could help whoever was still in optics. I could outline the types of lenses and prisms and the way that whole thing was worked out through magnification and through interposition of lenses between prisms so as to prevent any spherical aberration at high magnification, or to prevent the crossing of the light rays, which of course they'll do when you get to around 120mm of focal length. And so I've had so much else to do in other ways so I began to think, "Well, what's the use." I just didn't feel that I wanted to continue.

41. HUBBARD: Well, now Ben I know that there are problems here. I came out here a year ago to see John Crane. I'm just being very patient with him and I am going to try to do one step at a time. I am going to try to be here through next Wednesday. I have to go back to New York on Thursday. I am hoping that I will be able to contact John before I leave. But let's not be discouraged now if this thing doesn't get firmed up immediately. John has had these microscopes now for about twenty years and he hasn't done anything with them really.

CULLEN: He has a mind that is very fertile but doesn't complete anything he starts. He has a very fine system of monorail high-speed transportation but he simply doesn't push one particular thing long enough to realize its value or to get it into operation. He just scatters his fire and so he has so many things that are going up at the same time. Now with Rife, he would concentrate on a microscope and bacteriology, but to rest his mind he would pick up his French horn and play the most wonderful music, or he would just go out in his racing shell and go out and ride and row rapidly, or his fast bicycle and do six miles or ten miles on his bicycle, something like that, or he would study this multiple engine that he developed which was able to take wonderful photographs at 10,000 feet after sundown. And many things like that that he did. But he always came back to his one love and he completed that to the best of his ability.

42. HUBBARD: Now, Ben do you know of the whereabouts of any laboratory notebooks or any records that Rife made of the work that he was doing?

CULLEN: John Crane had them all.

43. HUBBARD: The story that he (Crane) has given to me is that the Food and Drug people removed those records from his home there at the time he was involved in some court actions.

CULLEN: Well, I have very little here, I thought I could find some considerable information, but I have very little here. What I do have originated from Crane. I did have a lot of information but after I married Jeanne we were quite busy taking care of this other place and doing many things that ties up my activities now and as a consequence whatever became of the stuff I don't know. I may come across it sometime because I have a lot of storage outside, but I simply have to make a living. My living comes from counseling and so forth. And I have developed a capacity, that is, scientific hand analysis and graphology, scientific handwriting analysis also, and all the means wherein I can advise and counsel people. And I always put everything on tape and that becomes a permanent record for that person for the rest of their life. It is a very important record and a document they should always take off and if possible transcribe it from tape to typewritten form. And of course I have been doing this now for the last 25 years. And this of course happened to be something that provides me with a little additional remuneration. Social Security couldn't take care of my expenses, not by 1/4. Of course I am 86 years of age and I have been retired quite a little while.

44. HUBBARD: Well, my father, you're are just about almost as old as my father. My father will be 89 in this November. He is still working.

CULLEN: What day in November?

45. HUBBARD: 5th of November.

CULLEN: I was born the 2nd.

46. HUBBARD: Well we have got the same birthday then. I was born on the 2nd of November 1922.

CULLEN: I wondered why you were so persistent. I said you couldn't be a Cancer, you couldn't be Gemini. You could be a Leo, but then I was wondering.

47. HUBBARD: Well this is very interesting. Let me switch, I am not going about this in the order that I should but, you would of course recognize Rife's handwriting, wouldn't you? And any laboratory notebooks that he had? Do you remember Alice Kendall or Mrs. Alice Callaway, Dr. Kendall's daughter?

CULLEN: I remember the name, yes, I remember Alice Kendall. But I didn't know her very well. I knew Dr. Kendall; he had a Chair in Northwestern.

48. Hubbard: Yes he was Dean of the Medical School there for a while and Chairman of their microbiology department.

CULLEN: Yes, he certainly was well up on microbiology and bacteriology. Also I met Dr. Rosenow too. He came up here. But Kendall was a splendid man because he knew so much, And he used of course, Kendall Medium, K-media, to maintain comparative tissue life and for anything we were doing with lung tissue section and any kind of excise material from animals like rats or guinea pigs.

49. HUBBARD: Where is Rife buried? Do you know?

CULLEN: I guess Bob Beck could tell you that.

50. HUBBARD: Bob Beck could tell me?

CULLEN: You know Bob Beck don't you.

51. HUBBARD: No, I don't, but I'll find out.

CULLEN: Well, his wife is the one that has the telephone number and I don't happen to possess that right now. I know just where he lives and that is something I can't give you right now. Bob is a very bright man in many respects but he is a man that indulges himself terribly with smoke in his lungs. He likes to keep his lungs loaded with tobacco smoke. And I have given him about just about another five years before he will pass on of emphysema or lung cancer. I've seen quite a bit of lung cancer working with Rife you know. Rife did quite a little job for the Cancer Institute at one time, and took two years analyzing a massive lung tissue section and that's where I learned all about lungs and stopped smoking. Of course I never did inhale, in the olden days you didn't inhale you just puffed, you got some of the smoke in your lungs, but not too much. It was more or less you lived with the atmosphere pretty well, but when you take it in from the cigarette or cigar or that sort, why it's pretty rich.

52. HUBBARD: Let me ask you some questions, if I were to show you some drawings, whether you could give me any clues as to a parabolic surface on any of these prisms. When we first talked over the telephone, you indicated that some of these prisms, that Rife had made some parabolic curves on them.

CULLEN: I know what I said, yes, he actually had figured out the parabolas and then ground the lenses to those parabolas. I would have wracked my brain considerably to be able to guarantee what I would see because at that time of course I studied them, but you know several things have happened since.

53. HUBBARD: I thought I had brought my drawings, copies of drawings John Crane gave me when I was here a year ago and these might possibly help you recall. Now this is not Rife's own drawings, but it is a drawing which Crane signed Rife's name to, and his name to, and there was a Carl R. Brown attorney. Crane tried to patent this later. He told me that they were not successful in getting a patent but he had amended it and he has a patent pending. Now then, this is one of the drawings he gave me. Now, do these prisms bring anything back to your mind? Do you recall if there was a parabolic surface cut on this area here?

CULLEN: This is not for the Universal Microscope, it doesn't look to me like it's for the Universal Microscope because he had prisms located at each corner of the bend from one side to the other and they interposed between these lenses, because the prisms themselves, as I recall it, did not magnify.

54. HUBBARD: The prisms themselves did not magnify?

CULLEN: Did not magnify, simply they carried the image through from one magnification to another on up through from the objective lens to the oculars.

55. HUBBARD: Now this does not then look like any of the prisms systems in his early microscopes either does it?

CULLEN: It doesn't. There are lenses here that indicate certain types of magnification, but he always interposed a lens between two prisms at each end and the, I can't tell you right now for as to what each lens, whether it was a convex or concave lens and what the parabolas were of each lens. Actually I was more taken up with the mechanical side. I did what I could to help in doing machine work on any parts that he needed. He had a very nice little machine shop there which I loved very much and I helped of course to do all I could there. When it came to preparing, for instance, for the tube, which was used to propel the Rife ray and to do any therapeutic work, then, I of course was quite interested. I made up all that sort of stuff. And the basis for the tubes, analyzed the types of gases that we should use to exhaust the atmosphere and interpose the inert gases, and so forth. That was my side, so actually I can't say that I would recognize that lay-up at all.

56. HUBBARD: Well now Ben, let me ask you, as soon as your hand is good enough that you can draw again, I would very much like to have from you a sketch giving your recollection of what the prism system and the lens system was that Rife had in his Universal microscope as best as you can recall. And then I'd also, I'd like to have your sketches on that section of what you did with tetanus bacillus. Now they don't have to be artistic, but if you could make approximations going step by step because you see, it is not only important that this microscope is an unusual thing, but his making the sections, there was nothing like this to come along for at least thirty years more.

CULLEN: Well, I can't promise you when I can do this.

A long talk by Cullen about his (Cullen's) religious beliefs.

57. HUBBARD: Was Rife very religious?

CULLEN: Not too much, no. He was very psychic. He could draw from the ocean of mind which I call it, another side, information about many things he couldn't have in his conscious state. As I told you, when he wanted an answer he would put his pad and pencil by his bedside and between eleven and two o'clock he always got his answer.

A long talk by Cullen about his (Cullen's) family history.

58. HUBBARD: All right, well let me ask you a few more questions. What motivated Philip Hoyland to bring that suit back there that destroyed that company and destroyed everything? What was Philip Hoyland like and where is he now?

CULLEN: Philip Hoyland was an English Jew. Now, I am very fond of Jewish people, but Philip was definitely the very grasping type, and very cunning. I noticed his cunning when he was working with me. I was turning out all the stuff and of course was also Executive Vice-President for quite a while, and Philip had some sneaky ways about him. When the Khan Realty Company brothers came down here from Los Angeles at the behest of the head of the AMA, his name was Morris Fishbein, when they came down here to see if they could find out something about us at the direct request of the head of the AMA they found quite a good deal with Dr. James B. Couche, who was a very fine physician and surgeon and had been a Fellow of the College of Surgeons for twenty years and Philip was in the office with us, and when they had found what we were doing they said, "Well we would like to buy into this corporation." Well I said, "This happens to be a closed corporation, we haven't requested the Commissioner of Corporations for the privilege to issue stock. That would take a long time if we did. At the present time we are not in a position to actually do that." So one of the brothers acted a little bit belligerent, and he said, "Well you ought to do something about it." And I said, "Why?" And he said "It would be good for you, it might be healthy for you." So I thought, "That is strange." And so they left finally.

59. HUBBARD: These two brothers?

CULLEN: These two bothers of the Khan Realty Company.

60. HUBBARD: The Khan Realty Company was in Los Angeles?

CULLEN: Yes, Los Angeles. They were a German Jewish Realty Company; their name was German-Jewish. And they met Philip Hoyland. I noticed that Philip was showing considerable appearance of friendliness toward them and I didn't think much about it until later I had found out that they had gotten hold of him and bribed him with a \$10,000 check.

61. HUBBARD: Did you ever see the check? How did you find out about the \$10,000 check?

CULLEN: I didn't see the check but I do know this, that it came from many sources and from his own lips later that they paid him \$10,000 and he had wished to God that he hadn't ever

accepted it. But just like Judas Iscariot who betrayed Jesus, as soon as he got that \$10,000 check then he kicked us into the courts on, not on bankruptcy but something similar to that.

62. HUBBARD: He wanted to get the directors changed.

CULLEN: Yes, he wanted to get the whole thing changed. But what happened was this Aaron Sapiro came out from Chicago, the Prosecuting Attorney, paid by the AMA.

63. HUBBARD: How do you know that Sapiro was paid by the AMA?

CULLEN: Because he made that statement to Bert Comparet and to others, and of course I was often times in the group and I heard what was said.

64. HUBBARD: This would be interesting to go to Comparet. Comparet could probably tell me a lot about this, couldn't he?

CULLEN: Yes he could. But there is an Irish Judge in that picture. If I recall right it was Judge Rodebaugh. I knew Judge Rodebaugh quite well from another connection. The case (Beam Ray) ran a year and three days in court.

65. HUBBARD: I have seen at least two different Judge's names down there in the courthouse. The last Judge was a man by the name of Kelly.

CULLEN: Yes, Judge Kelly came out here suffering from tuberculosis and moved to Ramona. Judge Kelly I think was the one who issued the final judgment.

66. HUBBARD: Then there was a Mundo, a Judge Mundo.

CULLEN: Yes Judge Mundo did sit in sometimes, but it was mostly Judge Kelly. Kelly was also pretty fond of "John Barleycorn." I found that sometimes Judge Kelly was under the influence. Of course, I met him up there in Ramona but he came out here with tuberculosis before I even got acquainted with Rife. In fact, when I was living in Ramona and just doing mechanical work to kind of keep myself going, the story is too long to go ahead and tell you why I came out here except I was hired to go down to Mexico to run a gold stamp mill for a gold mining company. But, so I met him up there and got acquainted with him and he knew me of course quite well. The same as Rodebaugh did. But I smelt liquor on him so many times, and I hesitated sometimes to know what to say to him. I didn't know whether he was under the influence of liquor when he was on the bench. So that is the situation there about that. Now, Sapiro was a very cunning man. In fact I think he did what's his name, Belliwell, this wonderful criminal attorney.

67. HUBBARD: I don't know anything about criminal attorneys.

CULLEN: That guy is known quite well in the west here, but he (Sapiro) was giving him quite a run for his money. However, Judge Kelly saw that Fishbein was trying to cause trouble when there was really no trouble there, because, actually, all the information that was brought out in the case was pretty well corroborated by the various doctors: Dr. Johnson, Dr. Rosenow, Dr. Gruner, Dr. Arthur Kendall, and Dr. Couche and so the case simply fell by the wayside. And I

praise God it did because they would have given me about ten years for being the one who was doing all of the organizational work and so forth. It was my corporation to start with.

68. HUBBARD: So Philip Hoyland really was the tool, in your opinion, he was an agent of other people who were trying to get in and make some money?

CULLEN: To get control of the corporation at the request of Morris Fishbein. Yes. You see, Dr. Hamer was another doctor. We supplied him with two instruments, down at National City. He passed a large number of cancer cases through that office with two operatives, each was using an instrument, and they simply recovered from cancerous conditions. And of course, what precipitated the whole thing was this old gentleman. I wish I could remember his name: 82 years old, he had a "butterfly." You know what they are, it is a superficial cancer, nothing but a malignant cancer of a papilloma-type and it looked like a piece of gory red liver. He was in a terrible mess. Dr. Hamer treated him, and when I saw him before he went back to Chicago there was just a little scab on this side (of his face) over here, which eventually Dr. Hamer said would fall off. When the AMA sued us, Dr. Hamer was one of our best surgeons in the Paradise Valley Sanatorium at that time, he closed his office and moved up to the Mill Valley up in Upper California. And when anybody asked him about the Rife Ray he didn't know anything about it. He didn't know anything about bacteriology at all. He wasn't a microbiologist, he didn't know anything.

69. HUBBARD: Well now, this is not the trial of 1939? This is later, wasn't it?

CULLEN: No this is the trial of 1939. Yes, Dr. Hamer had two of the instruments that we built.

70. HUBBARD: Originally?

CULLEN: Absolutely, the original.

71. HUBBARD: Ones that Rife himself had built?

CULLEN: Had helped to design and we had them rebuild them.

72. HUBBARD: Do you know where any of those original instruments are of Rife's?

CULLEN: I wouldn't know doctor.

73. HUBBARD: There would be no way for us to get a hold of the original records or anything?

CULLEN: I have no idea what John Crane would have now.

74. HUBBARD: Here is the thing Ben: Just in the same way that I found that this photomicrograph of this tetanus spore corresponded with what we learned thirty years later, in the same way, some of this material on the treatment of tumors and bacterial diseases may, now I don't say that I know it yet, I don't, I do not know it, but I suspect that there were some genuine cures in this that we could recognize today and I would like to be able, not now, but in a couple, two or three years, I would like to follow through on this. I would like to see what the records show because if there were biopsies, you see I am a pathologist and I can take a look

at some human tissues and very, very frequently I can tell whether it is really cancer, or what kind of cancer it is, or if it isn't a cancer. If it is a benign tumor I can tell what type it is. I can tell a lot of things, if I can just get the evidence. But getting the evidence is going to be rather difficult.

CULLEN: That is a problem because, you see, that work was done so long ago. When Benjamin Henderson brought his wife to Dr. Couche to treat, she had one of the worst cases of breast carcinoma I have ever seen. In fact her breast was almost all sloughed off. It looked terrible. But Dr. Couche, with the original laboratory instrument, cleared it up.

75. HUBBARD: The original laboratory instrument? The one Rife himself had built?

CULLEN: Yes.

76. HUBBARD: All right.

CULLEN: Then he had a number of cures, oh, a large number.

77. HUBBARD: What was the name of that doctor now?

CULLEN: Dr. James B. Couche. I think he died when he was 84.

78. HUBBARD: You see it makes a great deal of difference to me, Ben, as to whether Rife himself built a radiation device and a doctor used it, or whether it was one that Hoyland built.

CULLEN: You see everything that Hoyland did was also being done by all of us at the request and under the supervision of Rife. You see, we simply transferred from the laboratory instrument to the instruments that could be made up into one cabinet. And we had to have Rife's OK with everything we did. Roy worked with us all the time.

79. HUBBARD: But after Hoyland came in there he didn't work with you all the time, did he?

CULLEN: Not all the time no. Philip Hoyland was given the responsibility of calibrating every instrument on the oscilloscope and oscillograph. The instruments were calibrated but when we shipped two instruments over to Great Britain and Henry Siner went over to demonstrate the instrument, Hoyland by that time had simply scuttled the very valuable calibrations and they didn't do any good.

80. HUBBARD: Yeah! Well, I saw Gonin's letter, I saw the original, and Gonin complained that the instruments were not even wired up properly.

CULLEN: Now, that was all Philip Hoyland's fault.

81. HUBBARD: All right.

CULLEN: Gonin came over you know, I got acquainted with him. He pronounced his name Gonin. Yeah, in some languages you have a long i in the pronunciation. The laboratory instrument, I had it here one time. My first wife had a growth on her back right down the spine and it was then considered a superficial cancer that was spreading and so I treated it and it dried up and fell off. Now she was in Judge Kenny's Court at the time that John Crane and John

Marsh were there as criminals (1962), as the case was being heard, she was put on the witness stand and Bert Comparet asked her, at that time also he was again the attorney for the defense, he asked her, "I understand you had a growth on your spine?" She said, "Yes." He said, "What was it?" She said, "The Doctor called it a superficial cancer." He said, "what was done with it?" She said, "My husband used the Rife ray laboratory instrument and treated it and it dried up and fell off." And the Judge struck that out, wouldn't allow that to be shown in the testimony. That was when Crane was in for the criminal trial.

82. HUBBARD: Did you go to Crane's trial any Ben?

CULLEN: Yes, I was there several times.

83. HUBBARD: What do you think was really the cause? Why did Crane really go to jail?

CULLEN: Because first he had started to build small, what they call, little black boxes, two little grips to be held in the hands and treat conditions, to change the condition of the bloodstream so that if a person had cancerous virus in the bloodstream, why, it would tend to clear up that condition in the person suffering from that type of cancer. It would be cleared up. Now, he (Crane) got into a very ridiculous situation. He decided to go ahead and demonstrate and lease and sell these boxes without benefit of medical council. He organized a group and started selling them. He would sell them to different people. Supposedly he was only leasing them, which of course, is what we did with the earlier instruments. They were definitely large instruments and he was advertising it. He got a group together one day in the Grant Hotel down in the basement assembly hall, and where he picked up this guy I don't know but he picked up somebody that tried to make people believe that he had come from Venus.

84. HUBBARD: For heaven's sakes.

CULLEN: His name was, it's a peculiar name, Samason or something like that and he was trotting around with a regular military uniform with a Goodwill, well-tailored jacket with a sand brown belt, Stetson hat, polished brown leggings and knickers, trotting around all over the place, going to various churches and claiming he was direct from Venus. Prince Neason his name was. And so I went down to this meeting to see what was going on at the Grant Hotel. At the time I was working for the outfit called Norncar Manufacturing, which is now Ritiker Corporation, manufacturing various types of large receivers, benches, and so forth, or big dishes like 60-foot dishes and 100-foot dishes, and so forth, for various types of signaling devices like they used over here at the Naval Air Station on Point Loma. And so, I was called up on the stage by John Crane. There was about 50 people, one man was making some notes and I definitely picked him out as a deputy District Attorney. And this Prince Neason made the most outlandish statements I ever heard. He was just simply a charlatan and simply trading on the gullibility of this fellow John Crane. And so after I left there, Crane put me on the spot about asking me certain questions about Rife, which I could say without any more than just simply plain statements of fact. After I left there and went back to my office in this factory here in La Mesa, I simply wrote out my resignation and called him up and told him it was in the mail. And of course, not very much longer before that happened that the District Attorney's office made a raid on his property there without a search warrant and took a lot of stuff away.

85. HUBBARD: The District Attorney did? Or was it the Food and Drug Administration?

CULLEN: No it was someone to do with a, who would it be, a constable or police or who, I can't be certain. Anyway it had to do with the police authorities and they took a lot of his equipment away. And I think I will include one more item however, they did it without benefit of a search warrant. And he tried to sue them but because Mahity, definitely Judge Mahity has always been a very, very poor Judge, always done a great deal of cow-tying to the District Attorney's office. And whenever he, the District Attorney, or the Prosecuting Attorney would request the testimony would be stricken from the record, why, he always upheld the District Attorney. This is a tiresome thing also. In the last day of the trial I was in there at ten a.m. in the morning and it went on through to dinner and lunch, and after dinner we finished up in the evening. They had in there, as a witness, a man (Verne Thompson John Cranes engineer) who was working for the police department as the Chief Dispatcher and also their electronic engineer. He also had been used by Dr. Couche to keep the laboratory instrument in calibration. And he knew all this work because I had met him long before, oh many years before, up at the laboratory at Point Loma. I wish I could tell you his name. Bert Comparet could tell you. Now, he went on the witness stand and the prosecution asked him some questions about this black box. They asked, "Was it any good?" He said, "No, it was not any good, it was just a fake." And the whole thing went through that way and this of course is what threw both of these men into a ten-year sentence at San Quentin. But of course we got them both out after three years.

86. HUBBARD: John Crane was sentenced to ten years?

CULLEN: Yes, ten years, along with John Marsh. And so, let me see, so this man (Verne Thompson), as he came off the witness stand, I beckoned him over to me, I said, "For goodness sakes, now you knew the value of those little black boxes. They were properly calibrated for certain conditions." I said, "Why did you lie that way?" He whispered to me, "I have a job to protect." And I said, "For goodness sakes alive, you mean to say you would lie and send a man over the road, to protect your job?" He said, "I have a family." I said, "I don't wish you any hard luck, but I can't see you living too long. I'm not threatening you. I'm saying that I'm afraid that your perfidy and your unfairness will sneak up on you." And in two years he was dead. A strong, healthy man. Now ask Bert Comparet what his name was if you can. He was a man who was a dispatcher, his voice came over the police radio dispatching various patrolmen and prowl cars and so forth, and also did a lot of electrical work for the Police Department down at the foot of Market.

87. HUBBARD: What about Milbank Johnson? Do you remember Milbank Johnson very well?

CULLEN: Yes, he was a big, tall, handsome gentleman, very, very knowledgeable and extremely interested in Rife. He wrote a very fine letter one time after he had seen the work that was done at Miss Helen Scripps home on the treatment of a boy with papilloma. Around the neck here a cancer had eaten through so you could see the sinews and see the neck bones, so much of the flesh had dropped off around here. He had to be held up on this side all the time and held down so he could move his neck. Now Milbank Johnson and Kendall and Rosenow were there at the time that this work was done and they saw the tremendous value of the Rife Ray instrument because it actually cured that boy's papilloma up to a point where he had some

scar tissue for some time but he definitely was saved. He did not die. He was healthy and able to go back to work.

88. HUBBARD: How old was he?

CULLEN: About 21.

89. HUBBARD: When did Milbank Johnson die?

CULLEN: I don't know.

90. HUBBARD: He was on the faculty at the University of California Medical School here in San Diego? Or was it Los Angeles?

CULLEN: At the time I knew him he was a head physician for the Northwestern Insurance Corp, or Great Western. I really and truly am a little bit hazy, but both those names should be considered.

91. HUBBARD: All right, that gives me a lead.

CULLEN: Well, Doctor I wish I could stay for a long, long time.

HUBBARD: Well, Ben I'll stop now.

End of Cullen Interview