HISTORY OF THE
U. S. FOOD AND DRUG ADMINISTRATION

Interview between:

Kenneth E. Monfore, Retired

Director of Seattle District

and

Fred L. Lofsvold

San Diego, California

April 2, 1979

INTRODUCTION

This is a transcription of a taped interview, one of a series conducted by Fred L. Lofsvold, who is currently the Food and Drug Administration Regional Director at Denver, Colorado. The interviews were held with retired F.D.A. employees whose recollections may serve to enrich the written record It is hoped that these narratives of things past will serve as source material for present and future researchers; that the stories of important accomplishments, interesting events, and distinguished leaders will find a place in training and orientation of new employees, and may be useful to enhance the morale of the organization; and finally, that they will be of value to Dr. James Harvey Young in the writing of the history of the Food and Drug Administration.

The tapes and transcriptions will become a part of the collection of the National Library of Medicine and copies of the transcriptions will be placed in the Library of Emory University.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
FOOD AND DRUG ADMINISTRATION

TAPE INDEX SHEET CASSETTE NUMBER(S) 1

GENERAL TOPIC OF INTERVIEW: History of the Food & Drug Administration

DATE: 4/2/79 PLACE: San Diego, California LENGTH: 41 Min.

INTERVIEWEE	INTERVIEWER
NAME: Kenneth E. Monfore	NAME: Fred L. Lofsvold
ADDRESS: [redacted]	ADDRESS: U.S. Food & Drug Administration
[redacted]	Denver, Colorado

FDA SERVICE DATES: FROM 1929 TO 1967 RETIRED? Yes

TITLE: Director, Seattle District
(If retired, title of last FDA position)

CASSETT NO.	SIDE NO.	EST. TIME ON TAPE	PAGE NO.	SUBJECT
1	1	0 Min.	1	Introduction - Events relating to his being hired.
		6	5	Early Spray Residue Work.
		16	12	Pioneering In Filth Work.
	2	0	21	Filth and Decomposition in Cream Campaign.
		2	23	Discussion of Wendell Vincent & George P. Larrick.
		3	24	Renton's Hydrocine Investigation.
		7	26	Warm Springs Crystals Case.
		8	27	Spray Residue Work in Colorado.
		11	29	End of Interview.
				Attachment: Method for Detection of Worm Debris in Tomato Pulp Products. - Kenneth E. Monfore

L. - This is an interview with Kenneth E. Monfore, who retired in 1967 as the Director of the Seattle District, U.S. Food and Drug Administration.

Mr. Monfore was appointed as a Food and Drug Inspector in October, 1929 and reported for duty at the Denver Station of the Western District. In 1937 he was transferred to Spokane, Washington as Resident Inspector and in 1939 was promoted to Chief Inspector at the Seattle Station. He became Chief of the Seattle Station in 1944 and in 1948, at the time of the reorganization of FDA, he became the Deputy Director of the Division of Litigation in Washington, D.C. In 1949 he returned to Seattle as District Director and held that post until he retired in 1967.

This interview is taking place April 2, 1979, at San Diego, California. My name is Fred L. Lofsvold.

M. - Fred, it's a really great pleasure, particularly when you get into these years that make you feel a little bit older at least, to recall some of the things that have made my career one that I have described to many of the youngsters who I interviewed and hired over the years as chemists and inspectors of the FDA; that if I had it all to do over again, I'd do the same because of the tremendous joy that I had in this work.

As I told the young inspectors, it's the way they could protect the lives, health, and the welfare of all the citizens from even before birth, until death.

L. - It was very interesting work, wasn't it?

M. - Extremely, yes.

L. - A lot of very fine people to be associated with.

M. - Great, great people. And I recall the first man of FDA whom I met, although I never had a chance to work with him or under him, the man who interviewed me for a job in the FDA. I was still living at home in Emporia, Kansas and had graduated with a degree in Chemistry in 1929. That was the early part of the deep depression and Kansas was hard hit. Jobs were hard to find. Six members of my graduating class in Chemistry had taken the Government Civil Service exam for Junior Chemists. Three of us passed and became eligible for appointment. One of the boys who passed was a Korean who went back to his home country. The other lad got a job with the USDA meat inspection service. I lost track of him several years ago. On October 5, 1929, a Saturday, I worked about 17 hours until about midnight. Despite the fact that Kansas at that time was considered a hostile place for the colored man, my best fishing pal was a Negro about 50

years old. He and I went fishing about midnight that Saturday night in October. When I arrived home about 7:15 a.m. Sunday morning, I went immediately to bed and into a deep sleep. I was so tired. At 7:30 p.m. the phone rang. I didn't hear it, but my mother did. After struggling to awaken me, she finally got me to the telephone. It was a man named Bill Hardigan, who was Chief of the Kansas City Station, Food and Drug Administration. He was at the Harvey House, next to the Santa Fe railroad main line in Emporia and asked if I could come down immediately for an interview. I don't know how I got dressed or how I got there, but I did. He said he had only about another hour before he was going to take a train back to Kansas City. I remember getting to his room at the Harvey House and talking with him perhaps 30 minutes. I apologized for my half-awake condition and explained that I had been fishing all night. Although I don't know, but that might have been an assist for his recommending that I be appointed because it turned out he liked to go fishing too.

L. - Apparently he understood.

M. - Yes, and one week later I received a telegram from Headquarters in Washington, D.C. to report for duty

to J. Edward Kimlel, acting Chief of the Denver Station, FDA on October 21, 1929. That was my beginning in the Food and Drug Administration. Bill Hardigan and I saw very little of each other after that. He remained a great person in my opinion because of the work that he had accomplished in that region.

Reporting for duty at Denver, I learned that Mr. Kimlel had been there only a very short time. We had at the Denver Station two Inspectors, one was stationed most of the time at Salt Lake City. This included John L. Harvey who became Deputy Commissioner of FDA in his later years. I had the great opportunity in the next few years covering all the Rocky Mountain region from Canada to Mexico. There were many times that I got back home to see my wife and little son only after three or four months on the road.

L. - How many were there at that office at that time?

M. - There were two Inspectors including the one who spent most of his time at Salt Lake City, two chemists, two clerks and a lab helper.

L. - And also a Chief?

M. - Yes, Mr. Kimlel was the acting Chief.

L. - Everybody was acting in those days so they didn't

have to pay them as much money.

M. - Well, I met very briefly that month with John B. Kathe, the Inspector who was retiring and who I was to replace. I met him by going over to some parts of the apple country on the West Slope, as they called it in Colorado and then returning with him in a car so that he could give me some idea of the country and the places we were going to have to look at the problem of spray residue on apples and pears. Actually, the next year, the fall of 1930, provided my first real field assignment in checking orchards, rail and truck shipments of fruit for excessive poisonous spray residues. I have to say that if I named an area of law enforcement that did take a tremendous amount of my time, interest, and attention all through the years, it was the matter of spray residues on fruit.

L. - What were the problems in those early years?

M. - The big problem in those early years was lead arsenate sprays on apples and pears, apples of course being the major crop. That involved particularly what we called the Western Slope around Grand Junction and Delta, Colorado, as well as the Utah apple section. The heaviest residues of lead arsenate I've

ever seen were in the Western Colorado sections.

L. - Is that right? What did you do about it?

M. - Well, to show a little bit of the background with respect to the personalities in our old Western District of FDA, it was a definite mark of strength in both Wendell Vincent, Director of the Western District of FDA, and Kimlel that they took very serious the obligation of trying to correct problems of food adulteration, particularly poisonous spray residues in the fruits and insanitation, in handling milk and cream. I say that for this reason- When I first joined Denver and took that first ride to see some of the apple orchards with John B. Kathe, we saw the tremendous spray residues on the apples and a few samples were collected and sent into the laboratory in Denver. Dangerously high residues of lead arsenate were found. With this background a vigorous, enforcement program was scheduled for the next season. We were going to try to clean up the situation and make some seizures if necessary. I returned to the apple and pear growing and shipping areas in Colorado and Utah the next fall. I started collecting amples from Western Colorado, particularly, and if I were to describe the condition that I saw in

those orchards it would sound like I was being very, very much in the field of exaggeration.

L. - Why don't you tell me a little bit about it.

M. - I learned that the orchards in what is known as the North Fork, the big apple producing section running from Delta, Colorado up the valley to Hotchkiss and Peonia, were absolutely white with lead arsenate. There were as many as 13 and 14 cover sprays applied to the orchards in efforts to control coddling moth infestation. That's how bad the moth situation was and the farmers were desperate. That year in addition to using lead arsenate, many growers were using what they called Dynamite Spreaders, a composition of oleic acid and other materials which made the spray stick. The lead arsenate was thereby literally varnished on the fruit that season. Growers were washing their fruit, some with big commercial washing machines in which they used diluted hydrochloric acid and heated the solution. The weather was getting quite cool and occasionally in trying to get the heavy load of lead arsenate off, they would actually blister the apples and of course ruin them. They were shipping vast quantities of

fruit. When properly handled it was beautiful fruit. I started taking samples and warned the growers that shipments showing excessive residues would be subject to seizure action. These were investigational samples as we called them then, since the fruit hadn't entered Interstate Commerce. I was collecting and mailing 10 to 12 samples a day to Denver. This inspection and sampling began at the end of August and early part of September for the early variety, Jonathans, and continued through October for the Rome Beauty and Delicious varieties. The Denver laboratory mailed the results from the samples to me showing many to be excessively high in arsenic and lead residues. Following Chief Kimlel's request, I immediately sought information as to where the high residue lots were being shipped. I started by going to the freight agent at Cedaredge, Colorado at the upper end of the apple valley section. The freight agent was also an apple grower, but he promptly provided me with a file of freight bills on outgoing shipments. I then started reporting to Denver office cars containing high residue apples shipped to Chicago, Kansas City, New York and elsewhere. Within

a week or two several growers and shippers learned that their apples had been seized by the United States Marshals. This news spread like wildfire and at once I became public enemy number one in the eyes of everyone living in that part of Colorado.

L. - This was because you were getting seizures?

M. - Yes, this apparently was the first time that actual legal action was taken against high residue fruit.

L. - Is that right?

M. - Yes, indignation meetings were held immediately and a few extremely agitated growers said I should be hung from the closest telephone pole. My wife, who was with me on that trip to Western Colorado, became quite frightened and felt I should not attend their meetings as some requested. I did however attend their meetings to help them understand what steps they should take to get their industry in compliance with the Food and Drug law. I was, of course, extremely unpopular at that time. But, let's see how it worked out. The growers corrected the Dynamite spraying procedure and within the next two or three years, discontinued using lead arsenate and used new organic spray materials which didn't cause a residue problem since the material normally becomes inactive,

non-toxic, simply through weathering. Going back there three years later, the same men who said they would have hung me to the first tree they came to, now thanked me for what had been done. Those same growers said it forced them to create a new system and "to clean house". Now, we're making money where we didn't before, they stated. The change was almost unbelievable three years later.

L. - That has happened in many other kinds of circumstances in Food and Drug history too.

M. - It has. That began my career in watching spray residues and I watched it pretty much the rest of my Food and Drug life. I was blamed for taking cranberries and cranberry sauce off the market just before Thanksgiving several years ago after we found aminotriazole, a carcinogen, contaminated some of the cranberry bogs in the Pacific Northwest.

L. - May I ask you a question while we're talking about spray residue? Wasn't there a problem in tolerances where the Public Health Services stepped in and sort of whitewashed the problem?

M. - I'm not sure you're wrong because we're talking about a long, long time back. I do not remember a problem with Public Health Service over spray tolerances.

The Public Health Service had always had an interest in this area because of the public health aspect of the spraying and the residues.

I left Denver in 1937 and went to the Seattle Station area as an Inspector. I was working out of Spokane inspecting apple orchards not only within the state of Washington, but also Idaho. As I talked to growers, groups of growers, I pointed out the truth of what we had been saying about the dangers of sprays and spraying. I watched for actual evidence of poisoning among those farmers who for years and years had been spraying their trees and not paying much attention to their own health. I finally ran into a number of old time farmers, great people, who had spent their lives growing apples and who actually had blue gum line and wrist drop, which are typical signs of lead poisoning. I hadn't actually taken time to watch for that until about 1937 through '39. I went to some of the hospitals, for example, in Yakima, Washington. I had assistance through Public Health Service contacts, as well as people in Washington State Department of Agriculture, who had some control over spray scheduling. I observed histories showing stippled blood cells indicating

lead poisoning that the hospital was able to identify with the people who were in the hospital and ill from lead poisoning.

Other areas of this matter of protecting our food and drug supply from contamination and toxic materials keep appearing. Recently we were concerned about possibly dangerous radiation fallout from an atomic fragment dropping in Canada. In 1946 our Seattle District Inspectors and Chemists collected and analyzed many samples including water from the Columbia River, wheat from fields in Montana, and hay from pastures in Idaho for possible radioactive fallout from the atomic bomb testing in the South Pacific. We found no significant problem.

L. - I wasn't aware that you were doing that.

M. - Yes, I believe you can say that one of the highlight areas of my whole career has been the possible dangers from residues of poisonous materials.

L. - Well now you were involved in some of the early filth work too weren't you?

M. - You mean the cream squad?

L. - I was really thinking about insects and insect fragments. Didn't you personally do some of the earlier work on methods for--at least some work in

that field?

M. - I didn't know anybody remembered. That is quite a story. This paper I am handing you is the original copy of my crude method for detecting worm fragments in tomato products. It isn't dated.

L. - It was before the 1938 Act, wasn't it?

M. - Oh yes. In the fall of 1933. It is a very interesting story involving FDA top administrators, chemists, microanalysts, and field inspectors. I am somewhat hesitant to talk about it because one small facet might seem to criticize Dr. B. J. Howard, Director of FDA's Division of Microbiology. You may recall he did the research and developed the famous Howard Mold Count Procedure for quantitative micro-analytical detection of mold or rot in tomato juice, catsup, and puree. My crude microanalytical method for detecting ground-up worm fragments did result in several large seizure actions and the method was soon improved through cooperative work with Dr. Howard and his staff. Are you interested in this?

L. - Very much so. I expect you would be the only one who would be able to tell us this story.

M. - That may be true. I spent two fall seasons in Utah. One year it was investigating spray residues on

apples and the inspection of tomato canneries. At that time Utah had 38 tomato canneries in operation and they were putting out a big volume.

L. - You know I think they have only one or two now.

M. - I have heard that there may be only two tomato canneries left in Utah. In those early years they were big operations. Del Monte had a plant there. Campbell soup had their representative there, although they didn't operate canneries directly. They took almost the entire output of some of the big packers like Rocky Mountain Canning, Smith Canning Company, and Utah Canning Company. Those were tremendously interesting years to me. In one year there were some problems with apples although that wasn't a large apple producing country. I found that there were high residue apples going out of the Ogden and Logan, Utah apple orchards into Wyoming and Nebraska. I began working with the Utah State Inspector and we would follow trucks into Wyoming and get official samples for spray residues. Shippers promptly changed their practice and to remove the excessive spray residues before shipment.

The tomato problem developed in the fall of 1933 and involved heavy amounts of mold and rot in the

fruit delivered to the canneries. I remember that I made copious notes at each cannery inspection by counting and recording the number of tomatoes that were moldy or rotten, were getting by the sorters and went into the making of puree and catsup products. Fortunately the mold in the canned or bottled product was detectable by the B. J. Howard famous Mold Count method. I had been doing laboratory work including microanalytical and the mold counting for the Denver District for some time and that was the result of an accident.

At this point we must back up in time to March or April of 1930 when I had been in training as a Food and Drug Inspector about six months. While working with acting Station Chief, Mr. Kimlel, in the railroad years, I twisted or turned my right ankle. At the time the doctor, who examined me, said it was a simple sprain. He taped the ankle and I continued working. But, the foot continued to be bothersome. A year later in March of 1931, orthopedic surgery was performed on the heel bone. Fortunately the doctors were able to save the heel bone. But, I was in a cast to above the knee and unable to work for about six months.

L. - Does it bother you anymore?

M. - No.

L. - Well, that's incredible isn't it?

M. - It certainly is.

L. - And it's never been touched.

M. - I was in a cast for six months, but went back to work as a Chemist in Denver laboratories. At that time Denver Station did not have a trained microanalyst. I was interested and began studying the instruments and procedures. Mr. Vincent, then sent Mr. Ray Powers from the San Francisco laboratory to Denver to teach me microanalytical methods and particularly the Howard Tomato Mold Count Procedure. Although I preferred inspection work and the field trips, I became fascinated with the analytic procedures and techniques by which the analyist could detect adulterations. During the next several months my foot was healing and I was at the laboratory microscope analyzing samples of tomato products for mold adulteration. I found high mold fragment counts in several official samples and legal actions resulted in seizures of the shipments involved.

When the tomato season of 1934 arrived, my foot had healed and I went to Utah again to check on the

canning operations. I could hardly believe what I saw at the canneries. Beautiful tomatoes were stacked at all plants but were severely infested with tomato fruit worms. I made careful counts and found that many lugs of the fruit being dumped on the sorting belts and going on into the vats for tomato juice, catsup, and puree contained 50 to 55% wormy tomatoes. The situation I was reporting was so bad that Mr. Kimlel came over from Denver and Dr. Howard flew out from Washington, D.C. to see the conditions I had been reporting. Dr. Howard was well known to the canneries' management as the great scientist who had developed the Howard Mold Counting laboratory procedure which resulted in cleaning up the tomato canning industry with respect to mold and rot. The canners had great respect for Dr. Howard. He went with us to a few of the canneries and saw the conditions. During discussions with some cannery managers, he acknowledged that we, FDA, had no way or method of detecting worm filth when ground up and made into tomato puree, catsup or juice. That didn't set well with Mr. Vincent, Mr. Kimlel, or me.

When I got back to Denver Headquarters after the tomato canning season was over, I asked Mr. Kimlel

for permission to go into the laboratory and see if I could find some microanalytical method to detect ground up worms in tomato products. After Mr. Kimlel consulted with Mr. Vincent, at Western District Headquarters, my proposal was approved.

I started my laboratory research about the latter part of November. Since I am not an entomologist, I started by getting some tomato fruit worms and grinding them like they would be ground in a tomato cannery and then studied this material under the microscope using techniques similar to that used in mold counting. In about a month I came up with a method. After Mr. Kimlel reported to Western District Headquarters that I had found a method to detect and identify worm fragments in tomato canned products, he immediately requested official samples from reported shipments. I remember that the Denver sample storeroom soon became stacked to the ceiling with samples coming from all over the country for analysis.

Within a month or two Mr. Kimlel had recommended seizure actions on 8 or 9 shipments represented by the samples I had examined. After a considerable delay, Mr. Kimlel inquired as to the status of the

cases and learned that the seizure recommendations were resting on Dr. Howard's desk, awaiting his approval. Finally the Commissioner's office obtained the cases from Dr. Howard's desk and the violative shipments were seized by U.S. Marshals. The tomato canners ceased further shipments of adulterated tomato products and the problem was corrected. The method I developed was not a quantitative one, but simply a procedure for detecting and identifying some of the worm fragments. However, we learned that Dr. John D. Wildman, a microanalyst in Howard's laboratory in Washington, had started working on the now famous Wildman trap flask. He had been doing work with the flask and a method for detecting as quantitative as possible the amount of tiny insects such as thrips in frozen leafy vegetables, brussel sprouts and so forth. I don't know whether or not you knew about that apparatus.

L. - Is that gasoline flotation?

M. - Yes, gasoline flotation using a special flask to mix a small amount of gasoline with a sample of tomato catsup, for example, and allow the gasoline to float to the top. By means of the trap, the gasoline layer

is removed and filtered. The filter paper is then examined under a microscope. This made it possible to separate and identify a much greater portion of the insect fragments. We at Denver immediately obtained the Wildman method for worm parts and went from there.

L. - It's really quite a story.

M. - It has never been publicized.

L. - It's not widely known at all that you did some of the very original work on it.

M. - I felt I must do something, some pioneering because we were very concerned about the serious adulteration over which the consumer had no control.

L. - Yes.

M. - That cleaned up a bad situation, but B. J. never quite forgave me.

L. - Is that right?

M. - Those were interesting times. The cream campaign was also an interesting one. I had forgotten I had this picture taken at a creamery in Denver, Colorado in the first stages of the campaign to clean up dirty and filthy cream problems. Walter Green, who headed up FDA's program, is in the picture.

L. - Well, you know this business was still going strong when I was hired.

M. - What happened to the cream campaign?

L. - Well you know Bob Porter has told me that in his early days in the 1940's at Denver, when Wendell Vincent had come there as Station Chief, he had a cream campaign on the first day of January of every year. They had to work on New Year's Day because Vincent had the idea that that was the day they would find lots of dirty cream. They worked every New Year's Day for several years in Denver on the cream program. Could you describe a little about what cream testing really--how it was done and what kind of training you had for it?

M. - At the beginning, Walter Green called a group of Inspectors from various Stations over the country for checking on the procedures of identifying filthy and decomposed cream. We did have several training programs in which Green displayed the various types of dirty and rotten cream to this Inspectors group. We examined cream by looking at the appearance for example; live mold growths on top of the can, by tasting it with a sampling rod, and by smelling.

L. - You know that was a very active problem even after I came to FDA in 1939, but it is one that has virtually disappeared. There is very, very little traffic

anymore in farm separated sour cream that was held too long at the farm. In fact most of the small creameries who did that kind of work are now out of business. I think there's only one churn left in the state of Colorado, and in your time there must have been dozens of them.

M. - That's correct. We mentioned the cranberry matter.

L. - Yes, I'm really interested in that, but there are other things where we don't have good written records. There's quite a bit of documentation on the aminotriazole deal, but there isn't any record of some of the other things. When you do run out of actual subjects of that nature, I'm not sure you're out of them yet, but then some early personalities you could talk about too. Perhaps even early cases that were earth shaking even a little later might be interesting. As I recall, but you know better than I, what cases you were important. There was a case when you were Chief in Seattle where we lost the right to make inspection.

M. - Yes, that was the dried apple case.

L. - But, there might be others too that you know about.

M. - Washington Dehydrated Food Products Company, a dried apple producer, had refused to permit inspections for

a time. I have forgotten the owner's name. He was a great character, brilliant man but he just wouldn't allow any Inspectors in his plant for awhile. Later, he did. You mentioned the early personalities and I like to think about the stimulating drive of some of our early leaders like Vincent, Kimlel and others who had brought a feeling of doing a good job of law enforcement because our citizens generally had no way of protecting themselves.

L. - You know I worked for both of them too and they had this driving force, but they didn't drive you as an employee, they inspired you.

M. - Yes, that's right. I, too, was inspired by the dedicated drive of both these men.

Commissioner Larrick also exemplified this drive for effective action during the years when he was Chief Inspector. Mr. Vincent couldn't rest until a dirty creamery had been brought into compliance with the law. When I was a Resident Inspector at Spokane, Washington in 1937 to 1939, George Larrick asked all field stations to try to develop evidence of actual harm from the use of cinchophen and neocinchophen drugs purchased and used without prescription. These were very potent drugs which at that time could be

purchased and used without prescription, at least in some areas. There was such a product on the market called or labeled Renton's Hydrocine tablets. It was on the shelves of a few drugstores where anyone could buy it, but sales were very limited. Hence, it was difficult to find someone who had bought this article, taken it without doctor's supervision and suffered ill effects. The product was labeled and sold for treating arthritis and rheumatism. I do not remember all the details, but all field inspectors were asked to try to get this evidence. I know the whole field inspector staff worked very hard, but after a year's time, no one had been able to find such a case. The Field Stations were then advised that no further time need be given on this request. This disturbed me very much because sick people had to rely on FDA for protection against dangerous drugs. I said to myself, there's got to be somebody somewhere who has the facts we need. During field inspection work I kept an eye out for the product on drugstore shelves. I do not now remember the place, but I found a drugstore somewhere in eastern Washington, northern Idaho, or western Montana that had several bottles of this drug on the shelf. The

drug wasn't cheap. I do not know remember the details, but by that break I found an elderly lady suffering from rheumatism who had purchased this drug at the store in question. She had suffered ill effects from taking the tablets and willingly furnished the information needed. Headquarters was glad to get my report.

L. - In the course of that long investigtion did you go to the hospitals?

M. - Yes, every place that might supply a lead.

L. - Every place, doctors and so on?

M. - Yes, I don't remember all details. I developed the information on the one case.

L. - On the basis of your case they made it a prescription?

M. - FDA probably obtained more information after that. After Mr. Larrick said no more field investigation--it's not going to get it, I said to myself we are going to get it and we did. Those drugs are rarely used anymore.

L. - It seems like there was in those days more dependence on the work of an individual Inspector and his initiative than we do now days.

M. - That was a motivating part of it. In this case I

started out with just the assignment of what was wanted, what was needed, and the determination to find it. I certainly hope this doesn't sound like I'm talking and bragging about myself. These are simply the things that made the Inspectors and Chemists job so thrilling. .

L. - At that time my recollection is that one of the big problems of the Food and Drug Administration was trying to control fradulent claims for patent medicines. Were you ever involved in any cases of that kind?

M. - Yes, that brings to mind a case which, so far as I know, represented the first, if not the only, case under the law charging conspiracy to violate the law. That involved what I refer to as the Warm Springs Crystal case. I got into that case by interviewing one of the men involved in conspiracy who resided in Albuquerque, New Mexico. In my interview with him, I obtained copies of letters he had obtained from the two prime conspirators in Georgia, whose names (as I recall it) were Taylor and Hazelrigs. They played on the wide publicity of President Franklin D. Roosevelt's use of Warm Springs, Georgia hot water pools to promote their approximately one pound

packages of Warm Springs crystals for use in the treatment of arthritis, rheumatism and other human ailments. Their product was simply Glauber's salts or sodium sulfate purchased by the barrel at about 8¢ per pound or less. Glauber's salts principal drug use has been or was at that time, simply an effective laxative for horses. The trial in Federal Court in Columbus, Georgia resulted in guilty verdicts. As I recall the two principal defendants were sentenced to two years in a Federal penitentiary.

L. - In our interview today we talked a lot about the pesticide work and I know you've got some printed materials that cover this subject. It might well be useful to someone who wanted to get further into the history of pesticide work so could you talk about some of the materials you have?

M. - Well, I still have some of my old papers. I haven't very many. I was amazed that I still have this one, the first article that was printed by a paper in Grand Junction, Colorado concerning the spray residue program.

L. - Really, then this is very interesting because I'm from Colorado. The work in western Colorado then was

really the first work that FDA did on spray residue.

M. - As far as I know that's when we first got into it. The first year over there no official samples were taken at all. It was just to come back and warn them. I'd go around and tell them that their residues were too high and I'd put the bee on them to properly clean the fruits before shipment. But the next year Mr. Kimlel and Mr. Vincent directed that we begin real law enforcement and to report shipments of suspect fruit for destination sampling with view to seizure actions of those lots bearing excessive spray residues.

L. - Now what year was that?

M. - That first year of work on the spray residue program was 1930. I went over there and saw a little bit of it just after I reported for duty in 1929. It was 1930 when I went over and started the real investigation of spray residues on fruit. But it was 1931 when FDA actually started making seizures of high residue fruit. When this happened the telegraph wires got hot. Cars of pears and apples had been seized in New York and in Chicago. I became very unpopular and was subjected to some threats and my wife had some fears for my safety.

L. - I can imagine.

M. - Those were rugged farmers. I'll tell you, great people. Two years later they came around and thanked me. Those were great days.

L. - Thank you very much for this interview.

M. - Thank you for coming to see me. It's a real pleasure to visit with you.

L. - This concludes this interview with Mr. Monfore.

METHOD FOR DETECTION OF [illegible]

IN TOILET PAPER [illegible] -

Kenneth E. Monford

I. APPARATUS:

1. Decontamination or washing apparatus (Fig. 1).

2. Low power binocular microscope.

3. Stopwatch.

II. METHOD:

Fill a No. 2 can with water or extract and record weight. Pour material into decontamination machine (Fig. 1) and rinse all adhering pulp into container with water. Cover inside of outlet B and turn on water through pipe C. Allow level of water and material to reach point A and a on outlet B. Adjust flow of water so that a small stream overflows through tube F and the surface level remains at A, which should be at least one inch above top of outlet B. Permit to run in this manner 20 to 30 minutes, or length of time necessary to clear most of pulp material from surface area. Many times a bulky layer of finely foiled air bubbles and pulp will collect on the surface after about 10 minutes running. A satisfactory method of breaking up the air bubbles and thus allowing the mass of pulp to wash away and found to be [illegible] spraying the surface with a fine mist of 30% to 40% alcohol. This is accomplished by attaching an air hose to a small atomizer filled with alcohol and directing the spray on the surface of material. After the air bubbles have been broken, continue to run water through the apparatus until very little pulp material remains on the surface or runs out through B. Turn off water and permit surface to recede slowly to about 1/4 inch above outlet B. This is done by turning tube F until the out-

let is on a plane level with a point about 1/4 inch above opening E. Wash down material on sides of can. Remove glass tube D from overflow tube F and catch material in a clean beaker. Decant until all debris and pulp on surface layer has been collected. This should consist of very little pulp material because much tomato pulp not only clogs the filter, but also interferes with identification of worm debris. By tipping the can and allowing the material to run out slowly, about 800 to 1200 c.c. is sufficient. Filter through rapid filter, using suction. (Max Greverhoff filter #85 7 cm. has been found very satisfactory.) Place the filter in a petri dish and examine under microscope while moist. Low power binocular (Spencer No. 51), using oculars 17X and objectives 1.7X, has been found most satisfactory for this work.

If much pulp material remains at the bottom of the decantation can, again turn on water. Run until material remaining in portion of bottom of can is small enough to be collected on filter and examined as described above.

In order to identify worm filth, the analyst must become familiar with the appearance of the worm under the microscope.

DISCUSSION

When beginning the attempt to isolate and identify worm debris in tomato products, the corn-ear worms (obtained from raw tomato stock at summary) were studied under the microscope. Several worms were cooked and forced through a fine screen. Part of this worm-meat material was filtered and examined under the microscope and another part was subjected to the same decantation procedure as used for puree or catsup. It was noted that the largest portion of worm debris passed out the overflow.

Authentic dirt fractions, free from worms, were washed, dried, decanted, and examined on a filter under the microscope.

Several investigational samples were analyzed, using the above

tus for decantation as prescribed by Mr. W. S. Greene of Microanalytical Laboratory. This is the same as Fig. 1 without glass tube B. In other words, the material collected at the bottom of can was filtered and examined. During one of these decantation operations a few very small particles which kept swirling around on the surface attracted attention. These were picked off with a needle and found to be fragments of worm skin. It was then that steps were taken to find a method whereby a top layer as well as the material retained at the bottom of the can could be filtered and examined.

After trying several methods, the decantation apparatus was altered by placing a bent glass tube in the overflow pipe in such a way that the surface of the swirling material would be about 1 to 1½ inches above the outlet of the can proper. This permitted the pulp to gradually wash away until the upper surface, as well as the material at the bottom, could be filtered and readily examined.

The reasonable assumption that a large proportion of the worm debris passed out the overflow with the tomato pulp was further well substantiated by the following: After a sample of puree had been running in the decantation apparatus until practically all pulp material had passed out the overflow, 1500 c.c. of the overflow was collected and filtered. Upon examination three fragments of worm were found.

The outer skin of the corn-ear worm is apparently slightly oily, which would account for the fact that many fragments of worm skin remain on the surface during the washing process. It will be noted by the table submitted that the largest amount of identifiable worm debris is found in the surface layer of the washed material.

It has been found that a strong artificial light directed on the filter during examination by microscope is very important.

It is best to examine the filters while moist for two reasons: first, when the filter becomes dry the fragments become loose and often fly off the paper when touched with a needle; second, the filter itself curles at the edges. If the filter cannot be examined soon after filtration, or if much time is needed for the examination, a small amount of 50% glycerin solution may be passed through the filter to keep it moist.

Amount of material used for all following determinations was equivalent of No. 2 can filled.

SAMPLE	PRODUCT	FILTH IN SURFACE OR TOP LAYER	FILTH COLLECTED AT BOTTOM OF CAN
		9 fragments worm skin	3 fragments worm skin
1	Tomato Puree	2 fragments insects	1 fragment (small) fly wing
		24 fragments worm skin	4 fragments worm skin
2	" "	1 fragment fly wing	2 " " mouth
		1 fragment worm leg	
		1 worm hair	
		90 fragments worm skin	3 fragments worm skin
3	Tomato Catsup	2 sections worm skin and legs	
		1 worm leg	
		2 fragments insects	
		1 worm hair	
		59 fragments worm skin	3 fragments worm skin
4	" "	1 fly leg	
		2 insects	
		1 fragment insect	
		45 fragments worm skin	fragments worm
5	Tomato Puree	2 worm legs	worm hair
		1 section worm skin & mouth	1 fragment worm skin
		1 worm hair	1 fragment worm skin
		1 fragment insect	1 fragment worm mouth
		1 fly leg	1 worm leg
		1 fly head	
		93 fragments worm skin	3 fragments worm
6	Tomato Catsup	13 worm hairs	fragments worm skin
		3 worm legs	2 worm hairs
		1 fragment worm mouth	1 fragment worm mouth
		1 larvae	
		1 fragment worm skin	1 insect head
7	" "	worm hair	1 larvae
		1 insect head	

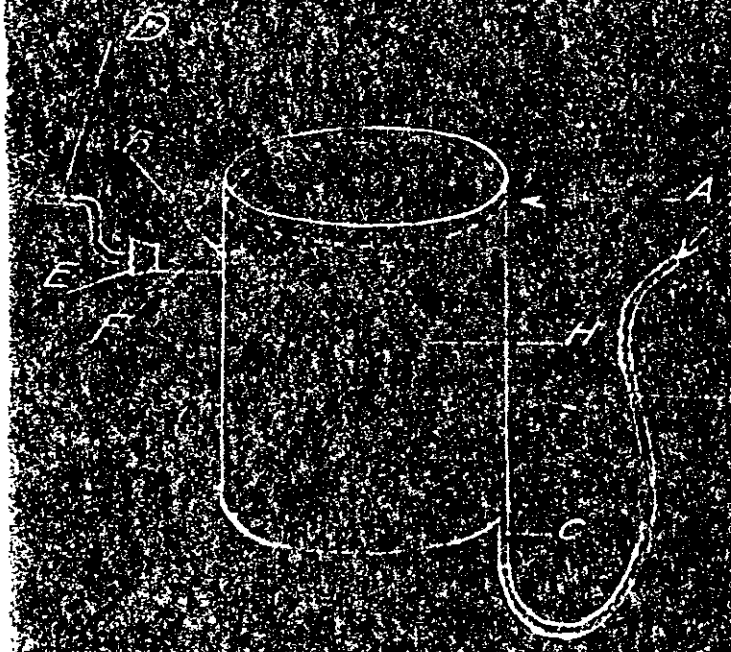

Fig 1

Diagram of Washing Apparatus

H = No 10 Can

F = Metal Pipe 3/4" internal diam

C = Metal Pipe 3/4" internal diam

G = Rubber Hose

D = Glass Tube

E = Rubber Stopper

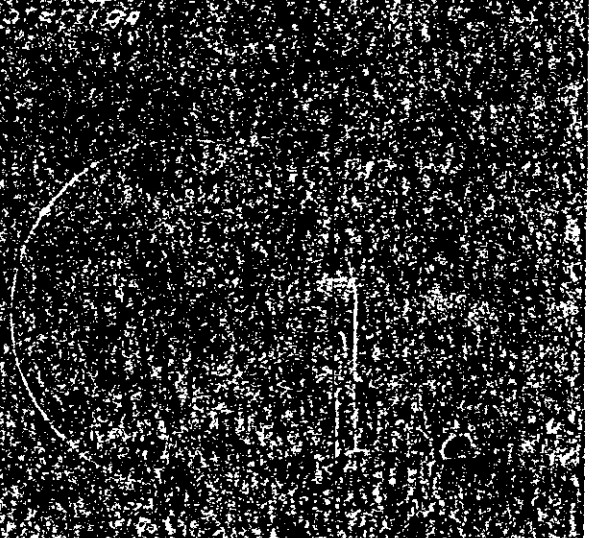

Fig 2

Cross section of bottom of can showing how pipe C should fit flush with inside of can

AIR MAIL

DIRECTORS OF DISTRICTS September 24, 1965

Bureau of Regulatory Compliance

Call for Information on FDA Activities
Crash Program -- Highest Priority

Under date of September 22, Commissioner Larrick initiated a program which will be concentrated in a two-week period beginning September 27, designed to pull together some of the finest known interest stories of Food and Drug Administration's work. This actually replaces the letter of September 1 which also went to the Districts regarding "Case Histories Illustrating FDA Mission and Progress."

A portion of this new plan as outlined by the Commissioner's Office is quoted for your information and guidance:

"PURPOSE - In June of 1966 the Food and Drug Administration will complete sixty years of service to the American people. We believe this has been 60 years of outstanding progress in improving the food and drug supply of our nation.

"The Department has recently requested us to furnish information on the activities of FDA, both current and over the past years, with special emphasis on items which may facilitate a better understanding and support of the work and accomplishments of our agency.

"The evolution of food and drug control in our country is an interesting story. Even more interesting are the innumerable stories of individual and group achievements by many dedicated public servants who are or have been a part of this work throughout the years.

"We can think of no more effective way to spell out to the consuming public how Food and Drug Law and its administration has significantly contributed to the health and social and economic progress of our Nation than to make these stories available to all who are interested.

"This, then, is a call for stories.

"1. Stories of how Food and Drug personnel have stimulated the use and advances of scientific principles in food manufacture."

" - Stories of how Food and Drug personnel have given impetus to drug therapy and to the growth of the pharmaceutical industry.

" - Stories of scientific breakthroughs in medicine, in pharmacology, in nutrition, in sanitation science, and in fact in all areas of basic public health.

" - Stories of vigilance. Stories of integrity. Stories of self-effacement. Stories of cooperativeness, imagination, and purposeful curiosity.

" - Stories to enable public consciousness of the importance of all Food and Drug Administration activities."

A number of Directors of Bureaus, Divisions, and Districts will begin promptly on Monday morning, September 27, to carry out the objectives which the Commissioner has outlined. It is therefore requested that each District Director, or other officer acting in that capacity, immediately canvass his District for ideas and suggestions as to stories and to promptly transmit such information by Rush - Air Mail - airmail for the attention of the Acting Deputy Director of the Bureau of Regulatory Compliance. In submitting your suggestions for stories list the files or reports which may be in existence, either in the field or in headquarters, which may be used for such detail as may be necessary. Wherever possible, a rough draft of the story would be most helpful.

Kenneth R. Kumford
Acting Deputy Director