

VOLUME 18

NO. 1

JANUARY, 1955

Journal of

MILK and FOOD
TECHNOLOGY

Official Publication

International Association of Milk and Food Sanitarians, Inc.

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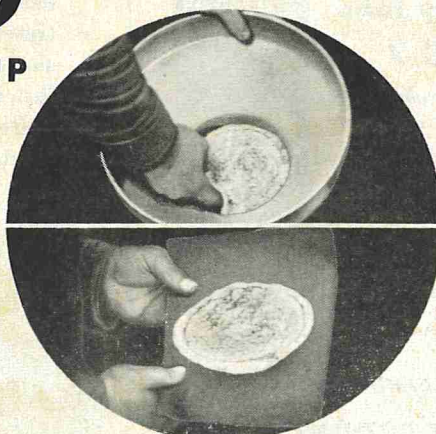
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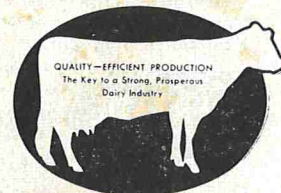
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Official Publication

International Association of Milk and Food Sanitarians, Inc.

REG. U.S. PAT. OFF.

Vol. 18

JANUARY

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CONTENTS

	Page
<i>Editorials:</i>	
Presidential Address —	
A Report to the Membership	1
Our New President	3
Food Additives Under the Federal Law <i>Ralph F. Kneeland, Jr.</i>	4
Report of the Committee on Education and Professional Development—1954	8
A Proposed Model Registration Act (Tentative)	10
Committees of the International Association of Milk and Food Sanitarians, Inc., for 1955	12
3-A Sanitary Standards for Inlet and Outlet Leak Protector Plug Valves for Batch Pasteurizers	17
Affiliates of IAMFS	25
News and Events	26
Helpful Information	
Classified Ads	29
Code of Ethics	30

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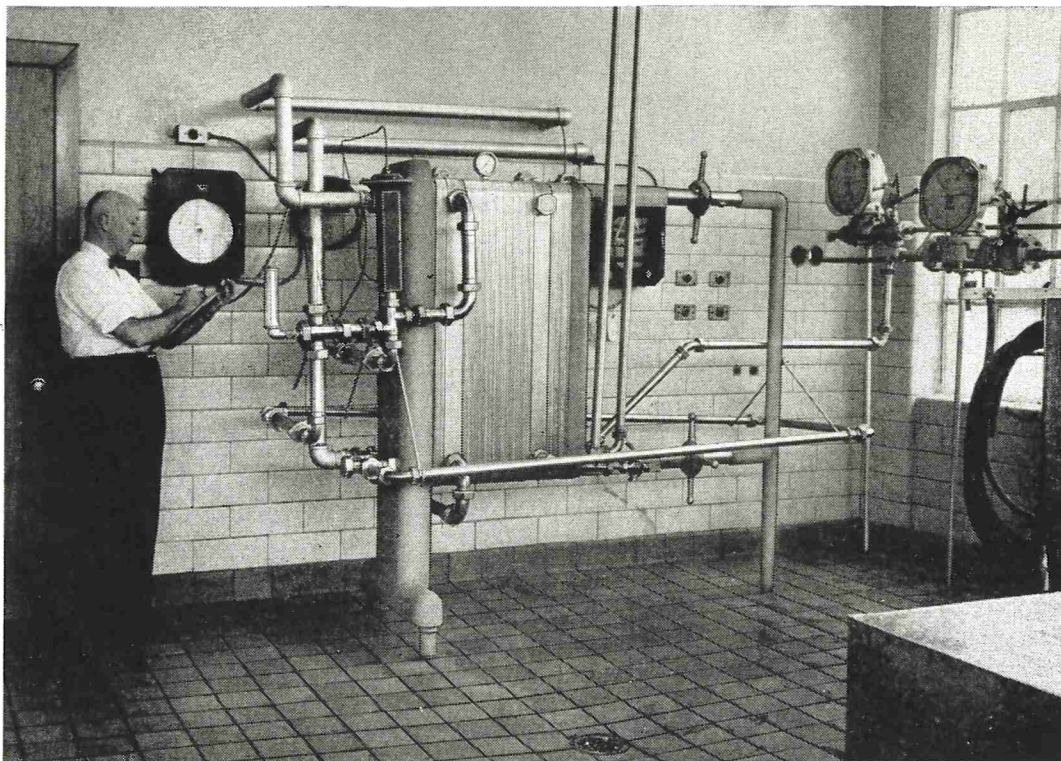
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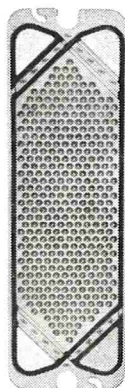


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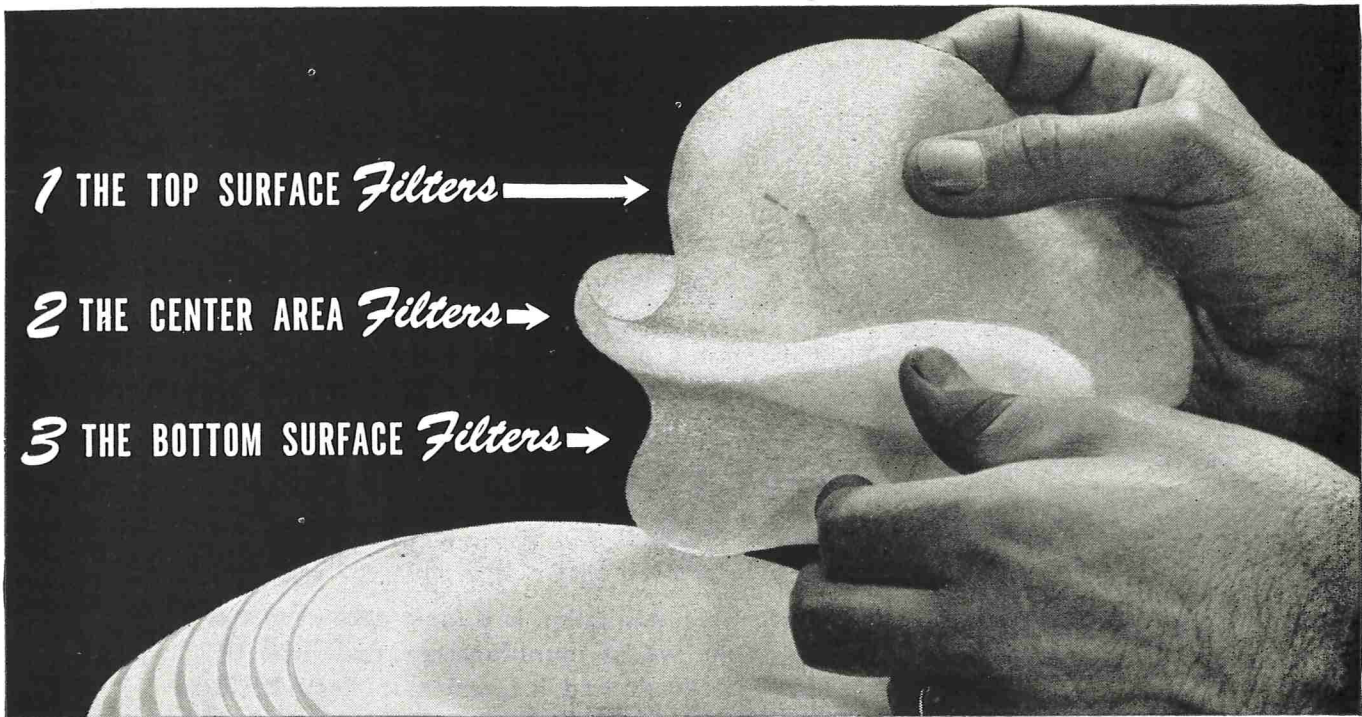
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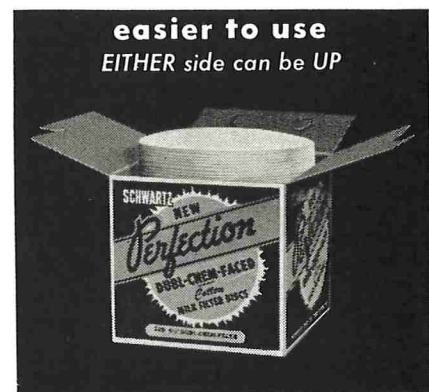
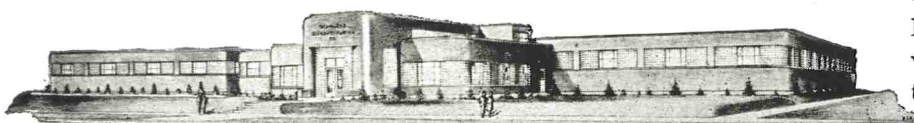
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Editorial Notes

PRESIDENTIAL ADDRESS — A REPORT TO THE MEMBERSHIP*



JOHN D. FAULKNER

On behalf of your Officers and of the Executive Board, I wish to welcome each of you to this, the 41st Annual Meeting of the International Association of Milk and Food Sanitarians, Inc. It is your meeting and I hope you will enjoy it. Let's make it a meeting of friends and fellow workers sharing together the knowledge gained through many years of experience in milk and food sanitation.

It is our hope that the information you receive here from technical papers, committee meetings and committee reports, and through the interchange of experience, will be of personal benefit to each of you, and that you will return home feeling that your attendance at this year's annual meeting was well worth-while.

It is my belief that the President's Address should take the form of a report to the membership, and that it should be used (1) to inform the members of the Association as to the current status of our affairs, (2) to report on major accomplishments and major activities of the past twelve months, (3) to direct attention to proposals for improving the Association, and (4) to present problems which require an expression of views by the membership. I shall try to cover briefly these four areas in this address.

As some of you may know, in 1951, this Association was close to bankruptcy. We had a deficit of approximately \$600.00, and it did not appear that anticipated revenue from dues and advertising would be sufficient to cover our annual operating expenses and the cost of publication of the *Journal of Milk and Food Technology*. Up until that time, our business affairs had been handled on a part-time and voluntary help basis, an arrangement which was grossly inadequate to cope efficiently with the business problems of an organization of our size. Membership records and mailing lists for the *Journal* were not kept up to date, and over 1,200 members were in arrears in the payment of their dues. To correct this situation, and to prevent its reoccurrence, the Executive Board decided, in 1951, to place our affairs on a business-like basis, through the establishment of a central office, employment of a full-time Executive Secretary, and the creation, if possible, of a reserve

fund. "Red" Thomasson was employed that year as our Executive Secretary and as Managing Editor of the *Journal*. In my opinion, this decision of the Executive Board was one of the most important actions ever taken by our Association. To date, it has proven to be an unqualified success. Our Executive Secretary has established an adequate bookkeeping and record system, negotiated a much better contract for publication of the *Journal*, increased our advertising revenue, and dropped those members who had not paid their dues. In addition, during the past three years, he has proceeded to establish close liaison with the Affiliate Associations, a step which is fundamental to the improvement of the service which the International Association of Milk and Food Sanitarians, Inc. can render its members.

As an indication of the effect these changes have had on our financial status and on the growth of our organization, I wish to report the following:

At the end of our fiscal year 1951, we had a deficit of \$600.00. At the end of fiscal year 1954, we have a balance of \$11,444.65, an increase of \$2,401.14 over our balance at the end of fiscal year 1953. In accordance with a directive from the Executive Board, \$6,000.00 of this balance has been set aside as a reserve fund with which to meet future contingencies. Let me emphasize that this improvement in financial status has been accomplished with no increase in membership dues.

On July 15, 1951, our membership totaled approximately 2,500. As of October 1, 1954, we had a total of 3,851 paid-up members. This represents a growth of 54 percent. The net gain during the past year was 309 members.

On July 15, 1951, 11 State associations had affiliated with the International. Today, we have a total of 27 affiliates. Three State associations have affiliated during the past year. These new Affiliates are the Tennessee Association of Sanitarians, the Idaho Association of Sanitarians, and the Sanitation Section of the Texas Public Health Association. On behalf of the International, it gives me great pleasure to welcome the members of these new affiliates to this meeting.

I would like now to devote a few minutes to the progress we have made during the past year in meeting certain of our objectives, and to acquaint you with some of the more important activities of some of our committees.

In order to improve the service the Association could render its membership, your Executive Board has had plans for a number of years to publish the *Journal* on a monthly rather than a bi-monthly basis—to give you twelve issues a year rather than six. However, since our previous financial position was so precarious, this could not be done without an increase in dues and subscription rates, an action which the Board did not wish to recommend. Because of the improvement in our financial status by the end of 1953, monthly publication of the *Journal* was authorized last fall and became a reality with the January 1954 issue, despite the fact that advertising accounts

for the additional six issues were quite limited. As our advertising increases, it is proposed to increase the size of each issue in order to bring you more technical articles, and more material aimed at helping the local sanitarian solve his field problems.

Another of our objectives has been to increase the number of food-sanitation articles appearing in the *Journal*, in order to strike a better balance between the number of papers on milk and those on food sanitation. While some progress has been made in this direction during the past twelve months, this will continue to be an objective of the editorial staff.

You will recall that last year a careful study of our Constitution and By-Laws was made by the Executive Board and by a Council Committee composed of three members, each of whom was a secretary of an affiliate. As a result, certain revisions and modifications of the Constitution and By-Laws were recommended, in order (1) to provide a more workable basis for the conduct of all business affairs, (2) to clarify the responsibilities and authority of the Executive Board, (3) to limit the membership of the Council and re-define its functions, and (4) to provide for a more equitable distribution of the responsibilities assigned to the various officers by the Constitution and By-Laws. The proposed revisions were adopted by a vote of those members in session at last year's annual meeting, following which a mail ballot was submitted to all paid-up members. The proposed revisions were approved, and they became effective January 15, 1954.

One of the principal reasons for revising the Constitution and By-Laws was to establish the Council as a truly advisory body to the Executive Board, thus providing a means whereby the Affiliate Associations would have a more positive voice in Association affairs and in the shaping of Association policy. For those of you who are not acquainted with the Council, under the revised Constitution it is an organizational body consisting of one representative from each Affiliate Association and five members from the Executive Board.

One of the accomplishments of which our Association is very proud is the establishment of the annual Sanitarian's Award. This award, which was first presented in 1952, consists of a Certificate of Citation and \$1,000.00 in cash. It is sponsored jointly by the Diversey Corporation, Klenzade Products, Inc., Mathieson Chemical Corporation, Oakite Products, Inc., and the Pennsylvania Salt Manufacturing Company. Its purpose is to recognize and honor a local sanitarian whose achievements have contributed greatly to the public health and welfare of his community. Neither the sponsors of this award, nor the Executive Board, have any voice in the selection of the recipient, as this is the sole responsibility of the members of our Committee on Recognition and Awards. I am happy to announce that the sponsors have continued the Sanitarian's Award, and that the 1954 award will be presented Friday evening at the Banquet.

I would also like to report that during the past year we became affiliated with the American Association for the Advancement of Science, and were invited to participate as one of the sponsoring groups in the National Food and Beverage Council whose objective

is to develop a Nation-wide program for improving food and beverage sanitation.

As I am sure most of you are aware, committees are the mechanism through which the technical work and developments of this Association are accomplished. Included in our committee projects for 1954 are several which, because of their importance, deserve special mention.

For the past two years, the Committee on Communicable Diseases Affecting Man has been working on techniques for improving evaluation of the extent of milk-borne and food-borne disease in the United States. Realizing that many States and municipalities do not have a manual of epidemiological procedure for investigating such outbreaks, the Committee undertook to develop a "Standard Procedure for the Investigation of Milk-Borne and Food-Borne Disease Outbreaks." In their work, the Committee has requested and received assistance from State and Federal health agencies, and from individual epidemiologists, health officers, research veterinarians, sanitarians and sanitary engineers. A draft of the "Procedure" has now been completed, and it is anticipated that it will be published by our Association in 1955. It is our hope that this work will stimulate and improve epidemiological investigation of milk-borne and food-borne outbreaks at the local level, thus leading to the correction of many of the conditions responsible for the annual transmission of thousands of cases of disease. For your additional information, the Manual will include procedures for conducting field investigations, procedures for the collection of suspected milk and food samples, report forms, and a classification of illness attributable to milk-borne and food-borne diseases. It is our belief that this "Procedure" will prove to be a valuable guide for state and local health departments, as well as individual health workers, and thus constitute a real contribution to the field.

During the past twelve months, the Committee on Education and Professional Development has been actively engaged in two projects of considerable significance. First they have developed a tentative plan for the establishment of an IAMFS undergraduate scholarship fund to aid students majoring in the sanitary science aspects of public health. An exploratory proposal indicating one method that might be used for financing such a fund has been sent by the Committee to all of the Affiliate Associations in order to obtain their views. This proposal calls for the establishment of the fund through a \$25.00 contribution from each interested Affiliate and the allocation of an additional amount by the International. A full report on this plan will be presented at the business meeting this afternoon. Certainly it merits your consideration, and I hope that it will provoke considerable discussion. In this connection, I would like to point out that as far as is known there is not at the present time a single scholarship available to the undergraduate who wishes to select the field of sanitation for his career.

The second project in which the Committee on Education and Professional Development has been engaged during the past year is the development of a draft of a proposed model "Registration Law for Sanitarians," which could be recommended by our Association to those groups who are considering the

adoption or sponsorship of such a law. Certainly this is a controversial issue, and one which involves Association policy. To date, the policy enunciated by your Executive Board has been that you cannot legislate yourself into professionalism; that registration must not be used as a means to an end, but rather as an end in itself; that registration should be used to demonstrate professional attainment and proficiency, based upon high-level qualifications and ability, and not as a device to insure job security and to protect mediocrity. However, we appreciate the fact that proper criteria can be written into registration laws, and therefore, have not been opposed to registration on a *per se* basis.

Advancement of the professional status of the sanitarian is, and has been, one of the objectives of this Association. Whether this can best be done by our support of a model registration law or by our participation in a National Board of Examiners for Sanitarians, or by both, needs further study. A detailed report on this question will be presented this afternoon by the Chairman of the Committee on Education and Professional Development. I urge you to discuss this matter openly and frankly, as the Executive Board is most anxious to obtain your views on this issue.

There has been one other major development during the past year on which you will be asked to express your opinion at this meeting. As many of you know, in 1944 the International Association of Milk and Food Sanitarians agreed to participate with the Dairy Industry Committee and the U.S. Public Health Service in the formulation of 3A Sanitary Standards covering the design and construction of various items of milk equipment. Since that time, 3A Standards for 17 items of equipment have been developed, and many more are in process. Equipment manufacturers are already following these standards in the fabrication of their equipment. However, to date the program has been weak in one respect, since there has been no device by which the local sanitarian could identify immediately equipment constructed in conformance with the standards. The application of the 3A symbol to equipment should overcome this difficulty.

Early this year, your Executive Board authorized the Committee on Sanitary Procedure to participate with the other members of the 3A Committee in the preparation of a plan for application of the 3A symbol to equipment, and for the establishment of a 3A Symbol Administrative Council to govern its use. Such a plan has been prepared, and will be presented to you for consideration at Friday afternoon's meeting. It has already been approved by the Dairy Industry Committee members. Your Executive Board has studied this proposal carefully, and recommends its acceptance by this Association.

These have been our major accomplishments and activities during the past year. It has been a busy twelve-month period, and I am proud that we have continued to move forward. However, before concluding my report, there is one other matter that I wish to call to your attention. Your Officers, your Committees and the Council are constantly striving to improve the International. It is our aim to mold this Association along lines which will better serve the membership, and which will more closely reflect your views. We

cannot do this job by ourselves, no matter how good our intentions or how hard we work. You have a stake in this Association's operations, and you also have a responsibility if you want a democratic organization. Therefore, I urge each of you to take a personal and active interest in the affairs of the International and of your own State Affiliate, to contribute to the technical work of the various Committees, and to make your views known on policies and programs you would like the International to follow.

In closing, I wish to pay tribute to the men whose unselfish devotion to this organization have made our accomplishments and this meeting possible. This is not an organization run by a few individuals. What we have achieved, and what we may achieve in the future, is due to the long hours of hard work put in by a large number of men who are willing to sacrifice their own free time, and very frequently their own money, so that others may benefit. These men do not ask recognition; their satisfaction is in seeing a job well done. The men to whom I refer are the individual members of our various committees, our Committee Chairmen, and the members of our Executive Board.

I thank you.

*Presented by President John D. Faulkner at the 41st Annual Meeting of the International Association of Milk and Food Sanitarians, Inc., Atlantic City, New Jersey, October 21-23, 1954.

OUR NEW PRESIDENT



Ivan E. Parkin was born in Meriden, Connecticut on December 28, 1903.

He was educated in the Meriden Public Schools until the end of his freshman year in High School. Working part time on a farm in milk, cheese, ice cream plants, and in a grocery store, he graduated in 1924 from the two year Course in Agriculture at the Connecticut Agricultural College, now

the University of Connecticut. In 1925, he completed the Winter Dairy Course at the University of Wisconsin.

In 1928, two major events of Ivan's life occurred when on September 1, he married Phyllis Evelyn Birdsey of Meriden, Connecticut and a few weeks later entered the University of Connecticut as a special student. In 1932, he received the B. S. degree, with High Distinction, in Dairy Manufacturing. During college his life was a busy one. Among other activities, he was varsity baseball manager, class officer, and president of his fraternity.

In 1934, after working six months in a cheese plant and for almost two years as quality control director

of the second largest milk plant in Hartford, Connecticut, Ivan went to the Pennsylvania State College as an Assistant Professor of dairy husbandry extension. In 1945, he was promoted to Associate Professor and in 1950 to Professor. He has written many articles, leaflets, and circulars on milk sanitation, home dairy manufacturing, and bulk milk handling. He has participated in more than 5,000 agriculture extension meetings in Pennsylvania.

Professor Parkin has been a prodigious worker for the American Dairy Science Association and the International Association of Milk and Food Sanitarians. In the American Dairy Science Association, he has held each of the elected offices of the Extension section.

Ivan has appeared on the annual program of the International Association of Milk and Food Sanitarians several times. At the Colorado meeting in 1950, he was appointed a member of the Executive Board and was appointed a member of the Committee

on Sanitary Procedures, which membership he still holds. He helped to bring into being the North Central Pennsylvania Association of Dairy Sanitarians which became the first affiliate of International Association of Milk and Food Sanitarians in Pennsylvania. Assistance was also rendered in bringing together the other four sanitarian groups in the state. He later helped form the Pennsylvania Association of Dairy Sanitarians.

Also, Ivan is a member of the New York State Association of Dairy Sanitarians and of Alpha Gamma Rho fraternity. He is an active member of the University Baptist Church having served it as treasurer for a five year period. He is a member of The American Academy of Political and Social Science and is listed in "Who's Who in the East".

The Parkin family including three children, Sherry Louise age 16, Sandra Lynn age 14, and Stanton Lee, age 10, live at 604 North Burrowes St., State College, Pennsylvania.

FOOD ADDITIVES UNDER THE FEDERAL LAW*

BY RALPH F. KNEELAND, JR.

Food and Drug Administration

Department of Health, Education, and Welfare

Washington, D.C.

Ladies and Gentlemen, it is a real pleasure for me to attend your annual meeting and to discuss with you a few of the problems in which we have a mutual interest. This interest is both official and personal, since we are concerned not only with effectively fulfilling our obligations as regulatory officials in raising the standards of cleanliness and safety of our food supply but also in sharing as consumers in the rewards of an effective program in this field.

The title "Food Additives Under the Federal Law" encompasses a problem with many facets. Bacterial contamination of foods might properly be discussed under this broad heading. I have been informed, however, that many of you are particularly desirous of a brief review of the present situation under the Federal Food, Drug, and Cosmetic Act as it relates to chemical additives and vitamin fortification.

It is perhaps unfortunate that the term "chemical additive" may con-

vey to a substantial number of people the meaning that the additive is in some way harmful or detrimental to the food. Such individuals fail to appreciate that foods themselves are chemicals or mixtures of chemicals and that chemical processes are frequently involved in the production and processing of foods both in the home and in commercial establishments. We receive many inquiries in which the misconception of the terms "chemical" and "chemistry" distort the real problem with which the inquirers are concerned, namely, the safety of our food supply.

Most of you are familiar with the provisions of the Federal law which are designed to safeguard the safety of our food supply. It does, however, seem desirable to review these provisions briefly at this time. The statute prohibits entirely the unnecessary addition of a poisonous or deleterious ingredient to a food. In recognition of the existence of naturally appearing constituents in foods which may be deemed to be poisonous or deleterious, the law provides that the test of legality shall be whether the quantity of the naturally appearing constituent is such as to render the article ordinarily injurious to health. Special

consideration is likewise given to the addition of a poisonous or deleterious ingredient to a food in those instances in which its use is required in the production of the food or which cannot be avoided by good manufacturing practice. In the latter situation, the Act authorizes the Secretary of the Department of Health, Education, and Welfare to establish safe tolerance levels for the added poisonous or deleterious ingredients. In establishing such tolerances, the Secretary must take into account not only the extent to which the use of the substance may be required or cannot be avoided in production, but also other ways in which the consumer may be affected by the same or other poisonous or deleterious substances. The application of this provision of the law to pesticidal residues on fruits and vegetables is, of course, readily apparent. Later in this paper I shall discuss briefly a recent amendment to the Federal Food, Drug, and Cosmetic Act dealing with the establishment of tolerances for pesticides on foods.

The intent of these various provisions of the Act to make our food supply safe is clear. The road to the objective is not always, however, a dual super highway,

*Presented at the 41st Annual Meeting of the International Association of Milk and Food Sanitarians, Inc., Atlantic City, New Jersey, October 21-23, 1954.

and reaching the destination may be considerably delayed by unfinished parts of the highway occasioned by inadequate or poorly designed equipment or lack of manpower and funds to complete the job. It would be well, perhaps, at this point to repeat what the Commissioner and other spokesmen for the Food and Drug Administration have said on many occasions. We sincerely believe that our food supply is the safest and the cleanest available in the world. This situation could not exist were it not for the sincere desire on the part of the vast majority of food manufacturers to comply with the food laws controlling their businesses and the wholehearted cooperation which such manufacturers extend to food control officials.

But as with most phases of our life, the situation is not static, new products are developed, new uses for old products are found, and advances in food technology are constantly being sought. These bring with them new problems or revitalized old ones. Advances in methods of analyses and pharmacological evaluation of food ingredients make it necessary that we frequently reappraise our policies and procedures in this field. The continually growing demand for commercially prepared foods of all kinds for home use has stimulated food producers to seek newer and better ways of preserving the palatability and attractiveness of their products. This has brought about the use or proposed use of many new substances as antioxidants, stabilizers, plasticizers, preservatives, inhibitors, softeners, emulsifiers, all which perform some function not directly concerned with the nutritive properties of the food. Obviously, their physiological effect when ingested by man is a proper matter of concern both to the regulatory official and the food manufacturer. The conscientious manufacturer will make a careful study of the toxicological properties of his product, not only in the light of the prohibition of the law against the unnecessary addition of a poisonous or deleterious ingredient to a food, but because he wants his products to be safe. Generally, it is not difficult to establish the unsuitability of an ingredient because of its acute

toxicity and this is but a minor part of the problem. The adulteration sections of the law have much greater meaning than merely prohibiting the acutely toxic substance. Since most of us consume at least some commercially prepared foods over most of our life span, the chronic effects of these additives must be carefully evaluated. We have been frequently asked what studies should be made to establish the safety of a food ingredient. As with most problems of this kind there is no one answer to the question. The facts of a given case must be given careful consideration. We have, however, expressed the opinion that the minimum study of an additive should cover at least the following basic points:

1. Establishment of the chemical identity and analytical methods of detection, identification, and quantitative estimation of the proposed additive.

2. Investigations of acute toxicity in test animals which should not be limited to rodent species but should include also one or more non-rodent species.

3. Study of subacute and chronic toxicity effects including not only growth, mortality, and reproduction patterns, but also blood level studies, metabolic fate of the compound, examination of organs and tissues, and similar criteria.

It must be kept in mind that a proposed ingredient, if deemed acceptable as an additive to a particular food, may quickly be found to attribute desirable properties to other foods, and thus the quantity to be ingested may be substantially increased over that to be anticipated from the original proposal.

In the case of foods generally, the Federal law places responsibility for using only suitable and safe ingredients upon those who bring their products within the jurisdiction of the Act. There is no prohibition against the use of untested or otherwise dubious ingredients in unstandardized foods should the unscrupulous or careless manufacturer elect to do so. If the government believes that an ingredient is unsafe, it is incumbent upon it to develop the necessary evidence to sustain its position in a court action. In the case of foods which are being considered for standardization under the provisions of

section 401 of the Act, the mandate that foods so standardized shall promote honesty and fair dealing in the interest of consumers has provided the Secretary with an opportunity to inquire into the safety of the ingredients proposed for use in the product to be standardized. The authority of the Secretary to exclude from a standardized food an ingredient of questionable safety was challenged following the promulgation of the bread standards. After extensive hearings an order was issued excluding polyoxyethylene-type surface-active agents from the standardized bread products. The United States Court of Appeals for the Third Circuit in upholding the action stated in part:

"On the whole record the Administrator properly concluded that the safety of the questioned products had not been established although he was unable to conclude that they were deleterious." Thus, the Court has interpreted the standard-making provisions of the law as providing a safeguard against the use of an ingredient of undetermined safety, which the law does not provide in the case of unstandardized foods.

In 1950 it was brought out in testimony at hearings before the House Select Committee to Investigate the Use of Chemicals in Food Products, that as of approximately four years ago there were some seven hundred and four chemicals thought to be used in foods at that time, of which approximately 428 were "probably safe" as normally used. This prompted the then Commissioner, Mr. Crawford, to state at a meeting of Food and Drug officials,

"This leaves an interesting field for speculation and for work to get the facts about the presumed safety of some of the 428 and about the undetermined safety of the remaining 276." Undoubtedly since that time there have been some additions to both lists as well as a few deletions.

Most of you are familiar with the fact that about the middle of May 1953 pharmacological investigations carried out on behalf of the primary manufacturers of the flavoring agent, coumarin, demonstrated that this substance adversely affected animals when consumed in quantities comparable to that to be found in human diets. Despite the fact that no direct evidence had been developed that the use of coumarin in foods was injurious to man, it is

to the credit of the responsible producers of the product that they discontinued the sale of coumarin for food purposes.

This illustrates the need and desirability of stopping and taking a fresh look at old problems from time to time. New techniques and new scientific knowledge may justify a new course of action. To the extent that our facilities permit, we are taking another look at the evidence with respect to certain certifiable food colors, flavors, and other substances in the light of newer criteria of safety and recently developed pharmacological evidence. It would not be possible to discuss in a paper of this length specific products of the kind we have been considering in this phase nor, I may confess, would I be capable of doing so. In this part of my discussion I have been talking about ingredients which are not necessary in the production of the food and which can be avoided in good manufacturing practice.

Turning now to another type of food additive, which is of increasing interest and concern, the problem is relatively new. It is the outgrowth of the rapid development of knowledge in the fields of animal nutrition and veterinary medicine. The effects of medication and feeding practices of food-producing animals on our human food supply is a problem to which we are devoting considerable attention. The facts as developed to date do not justify alarm but do warrant a critical analysis of any new developments. Some control over this field has been exercised by the Food and Drug Administration under the new drug provisions of the law. In a statement of policy entitled "New Drugs Intended for Animal Use," manufacturers, packers, and distributors of veterinary preparations and animal feeds were placed on notice of our position in this matter. The notice reads in part as follows:

"A number of products have been developed to promote fattening, increase milk or egg production, or effect other physiological changes in farm animals. Many of these compounds contain as active ingredients substances the toxicity of which is known to be of a high order. For example, thiouracil, a very potent drug, has been proposed for use to promote fattening. When such substances are added to food they render

the food adulterated under section 402 (a) of the Federal Food, Drug, and Cosmetic Act.

"The Federal Security Agency regards sections 402 (a) (2) and 406 of the Act as clear enunciations of congressional intent to deny the channels of interstate commerce to food containing added poisonous or deleterious ingredients which are unnecessary in its production or which can be avoided by good manufacturing practice.

"Since these compounds are intended to affect the structure or function of the body of animals and have not been previously used for such purposes, they are regarded as new drugs, requiring the submission of adequate evidence of their safety, as required by section 505 of the Act, before being marketed in interstate commerce.

"In considering a new-drug application for a product intended to effect physiological changes in farm animals, the Federal Security Agency will regard the absence of satisfactory evidence showing that the meat or other food obtained from animals fed the drug is entirely free of any poisonous or deleterious ingredient resulting therefrom at the time of marketing as ground for refusal to make the application effective."

In carrying out this interpretation of the Act voluminous data intended to establish the safety of food produced from animals fed such proposed new products have been reviewed. Where the evidence has satisfactorily established the absence of toxic or deleterious ingredients in the food portion of the animals or in the food products produced by such animals, the applications have been made effective and the products permitted interstate distribution.

Without minimizing the economic importance of these developments in the production of animal foods it will be our purpose to continue to resolve questions of doubt in favor of the consuming public to the extent to which we are authorized by the law.

Earlier I referred to a recent amendment to the Federal law dealing with the establishment of tolerances for pesticidal residues on fresh fruits and vegetables. A bill entitled "An Act to Amend the Federal Food, Drug, and Cosmetic Act with Respect to Residues of Pesticide Chemicals in or on Raw Agricultural Commodities" was introduced by Representative A. L. Miller of Nebraska. After passage without a dissenting vote by both branches of the Congress during its last session it was approved and enacted into law by the President on July 22, 1954. Commonly refer-

red to as the Miller Pesticide Chemical's Amendment this law makes two fundamental changes, both designed to simplify and expedite the establishment of safe tolerances for pesticide chemical residues on raw agricultural commodities. It assigns to the Secretary of Agriculture the functions of determining the agricultural usefulness of pesticide chemicals and probable residue levels resulting from their use. The responsibility for determining what residue levels may be safely tolerated without hazard to man is vested in the Secretary of Health, Education, and Welfare. In place of the formal and somewhat cumbersome procedure prescribed by the law prior to its amendment the new law emphasizes informal procedures. The amendment encourages the resolution of complex technical problems in a scientific atmosphere rather than in the give and take of a hard fought law suit. It places upon the proponents of a new economic poison greater responsibility for the development and presentation of basis facts about the article prior to its commercial distribution or to a consideration by the Secretary of the Department of a tolerance for residues resulting from use of the product. A further provision is made in the case of differences of opinion or uncertainties as to the proper action to follow for reference of the problem to an advisory committee. The law provides that the advisory committee shall be composed of experts qualified in the subject matter of the petition and of adequately diversified professional background selected by the National Academy of Sciences and shall include one or more representatives from Land Grant Colleges. The right of judicial review in a formal proceeding is reserved to the petitioner or other adversely affected party if the problem cannot be resolved through the informal procedures provided by the amendment.

Yesterday proposed regulations dealing with pesticidal residues were announced. The proposed regulations are in two parts. The first regulation proposes tolerances for 26 pesticides in common use based on scientific data developed at hearings held in 1950 under

section 406 of the Federal Food, Drug, and Cosmetic Act. The second regulation sets up operating procedures under the Miller Pesticide Chemical's Amendment. Obviously it would be premature to attempt any predictions as to how the new law will function in actual practice. During its legislative consideration it was supported by the pesticide manufacturers and by representatives of the food manufacturing industry, as well as by the Department of Health, Education, and Welfare and the Department of Agriculture. It undoubtedly reflects the hard-won experience gained by both the government and industry in proceedings under the former provisions of the law and certainly it reveals the earnest desires of the pesticide manufacturers, the food industry, the government, and the public as a whole for more effective laws to insure the safety of our food supply.

Before passing to the question of vitamin fortification of foods under the Federal law, I wish merely to refer to two other types of food additives which are of current importance and which present their own peculiar problems. The first is the increasing use of artificial nonnutritive sweeteners in foods. In our opinion a substantial number of these products are of dubious legality under the law and clarifying court decisions may be necessary to resolve their legal status. Some time ago the Food and Drug Administration requested the National Research Council to study the nutritional questions raised by this development as an aid to us in reappraising our present policies and regulations dealing with this field with a view to revision if the facts warrant. The second type of additive is that which results from the transfer to foods of certain components of food wrappers or other food containers. Some of these substances are added to the food wrap for antimycotic effect or other special purposes and which are intended to become a part of the food. In other instances the components of the wrapping material accidentally become a part of the food which raises the question of their suitability for food container use.

Turning now to the vitamin fortification of foods.

When scientific developments made it possible to produce commercially at reasonable cost various vitamins in pure or concentrated form, food manufacturers were naturally quick to grasp the opportunity to add these substances to their food products. Undoubtedly, some were genuinely interested in improving the nutritional value of their products. Others saw in this new scientific development excellent advertising opportunities with little or no regard to whether the added nutritional factors would make any significant contribution to consumers. All of you are familiar, at least in a general way, with the development of the flour and bread enrichment program and the earlier pioneering effort to improve the nutritional value of a common food by fortification of common table salt with potassium iodide which was initiated in this country by the manufacturers upon the recommendations of the Michigan State Department of Health and the Michigan State Medical Society.

Today it would be very difficult to name a food which someone has not advocated be fortified. Many of these proposals have reminded Dr. E. M. Nelson, Chief of our Division of Nutrition, of a cartoon which he has had for many years. It depicts a meeting of the board of directors of an oil company with the chairman making this statement, "Our research department has succeeded in adding vitamin B₁ to our gasoline, now it is trying to think of a reason for doing it." The Food and Drug Administration believes that the research department should develop the reasons for adding special nutritive ingredients to foods before attempting to find out how to do it.

Shortly after the effective date of the Federal Food, Drug, and Cosmetic Act of 1938, it became apparent that food fortification would become an important matter of consideration in establishing legal standards under the provisions of the law. It was important therefore that some basic policy in this field be developed by the Administration which would be in keeping with the fundamental purposes of the statute and scientific knowledge in the field of nutrition. After the standards for flour

products were announced in 1941 a court review of the order establishing the definitions and standards for farina and enriched farina was obtained by one company. One of the issues raised was the authority of the Administrator to prohibit the marketing of wholesome, honestly labeled products through the standard-making provisions of the law. In one of the most important Supreme Court decisions affecting the enforcement of the Federal Food, Drug, and Cosmetic Act the government's position was sustained. While perhaps many of you are familiar with this decision, it seems to me that portions of it are worth repeating at this time.

"Both the text and legislative history of the present statute plainly show that its purpose was not confined to a requirement of truthful and informative labeling. False and misleading labeling had been prohibited by the Pure Food and Drugs Act of 1906 but it was found that such a prohibition was inadequate to protect the consumer from economic adulteration The remedy chosen was not a requirement of informative labeling. Rather it was the purpose to authorize the Administrator to promulgate definitions and standards of identity 'under which the integrity of food products can be effectively maintained' The provisions for standards of identity thus reflect a recognition by Congress of the inability of consumers in some cases to determine solely on the basis of informative labeling the relative merits of a variety of products superficially resembling each other. . . . Taking into account the evidence of public demand for vitamin enriched foods, their increasing sale, their variable vitamin composition and dietary value and the general lack of consumer knowledge of such values, there was sufficient evidence of 'rational probative force' to support the Administrator's judgment that in the absence of appropriate standards of identity consumer confusion would ensue."

Thus, again, for other reasons, the standard-making provisions of the law permit a control over ingredients not available in the case of unstandardized products.

On the basis of the experience gained in the establishment of standards for flour and the support accorded the Department's position by this decision a statement of policy with respect to the addition of nutritive ingredients to foods was issued in July of 1943. The criteria expressed in this statement remain today as the standards of judgment by which we appraise proposals to fortify foods. While somewhat lengthy I hope you will forgive me if, because of its importance and your apparent interest in the

matter, I read this statement:

"The labeling or advertising of a food as enriched with vitamins and minerals is an implied promise to consumers that it contains, in addition to the normal constituents of the unenriched food, sufficient vitamins and minerals to make a substantial contribution to the nutritional welfare of persons eating the enriched food in customary amounts. In order to promote honesty and fair dealing by fulfilling this implied promise, it is necessary that the kinds and quantities of enriching ingredients be determined in the light of deficiencies of the various nutritional factors in the diets of the population in general and of significant population groups, the place occupied by the food in such diets, and the suitability and effectiveness of the food as a carrier of the enriching ingredients without undue separation or loss before consumption.

"Honesty and fair dealing will best be promoted if such enriched foods as are made available to consumers serve to correct such deficiencies and furnish a reasonable margin of safety. Enrichment above the levels required to accomplish this end is wasteful and contrary to the interest of most consumers; nutrient factors in concentrated form are available for use in those special cases of deficiencies in the diets of persons who do not constitute significant population groups. Enrichment of foods with nutrients that are supplied in adequate quantities by the diets of all significant population groups is not only wasteful but tends to confuse consumers as to their nutritional needs.

"Knowledge of the roles in human nutrition of various components of food, particularly the vitamins, is incomplete. There is reason to believe that as new information is developed food factors not now recognized as essential may be shown to be necessary to adequate nutrition.

"Most natural foods contain a wide variety of needed factors in significant

amounts. It is highly probable that a diet of unenriched foods so chosen as to contain the required quantities of the presently known needed vitamins and other factors would more nearly supply all needed factors, known and unknown, than a diet which is raised by enrichment to adequacy in the vitamins and minerals now known to be needed.

"Even though adequate nutrition could be better assured through the choice of natural foods than through reliance on enrichment, unenriched foods of the kinds and in the quantities necessary for adequate nutrition are not now available to substantial parts of the population and are not likely to be available soon; nor are most consumers sufficiently educated on nutritional questions to enable them to make an intelligent choice of combinations of unenriched foods on the basis of nutritional values.

"Because of the lack of adequate production of a number of foods high in certain nutrients and the lack of consumer knowledge of nutrition, appropriate enrichment of a few foods widely consumed by the population in general or by significant population groups will contribute substantially to the nutritional welfare of consumers and to meeting their expectations of benefit. Enrichment of those foods which are not a substantial part of the dietary of any significant group tends to confuse and mislead consumers through giving rise to conflicting claims of nutritional values and by creating an exaggerated impression of the benefits to be derived from the consumption of such foods.

"If the customary process of manufacturing a staple food refines it so as to remove significant quantities of nutritive factors present in the natural product from which the food is made, and if the refined food is a suitable and efficient carrier of the factors so removed, some nutritionists advocate the restoration of such factors to the levels of the natural product as the most desirable basis of enrichment. To the extent that restoration serves to correct deficiencies

of such factors, it is consistent with the promotion of honesty and fair dealing that refined foods be enriched on a restoration basis. However, when the evidence shows that the restoration levels are too low to correct deficiencies, or that deficiencies exist in other factors for which the refined food is an efficient carrier, the promotion of honesty and fair dealing may require the inclusion of corrective quantities of nutritive factors in the enriched foods even though such factors are present in smaller quantities or wholly lacking in the natural product from which the food is made. Similar considerations may require the enrichment of unrefined foods."

Up to the present time standards for fortified foods have been established under the Federal law for the following products:

Enriched bread and enriched rolls, enriched flour and enriched related products, enriched macaroni products, enriched noodle products, evaporated milk with a provision of the optional addition of vitamin D, oleomargarine with a provision for the optional addition of vitamin A, and various enriched corn products.

There are, of course, many unstandardized products on the market to which various vitamins and minerals have been added. That many of these products fail to measure up to the philosophy in the Department's policy announcement on this question is apparent.

In closing may I again express my appreciation for this opportunity to meet with you and to express on behalf of the Food and Drug Administration our good wishes for the continuing success of your association and to its individual members.

REPORT OF THE COMMITTEE ON EDUCATION AND PROFESSIONAL DEVELOPMENT — 1954¹

The Committee on Education and Professional Development during the current year has directed its efforts and attention to two specific interests. The first of these involved a proposal to establish scholarships at the academic level for students choosing the field of

public health and sanitation as a college major. The second project undertaken concerned the drawing of a "model law" which might be used by state affiliates of the International as an act appropriate to recommend for passage by state legislative bodies. The model law in question establishes procedures for the legal registration of professional sanitarians.

In proposing the first of these two projects, namely a plan for academic scholarships, your committee was motivated by a number of pertinent facts, among which were the following:

a. The education and training of the sanitarian is fundamental to his professional development. If the sanitarian is to attain professional status there must be established a base from which to operate and this base must be closely correlated with his education and training. A scholarship plan is one tangible means of demonstrating the interest of this Association in the specialized and technical training of the sanitarian.

b. The number of persons electing public health training at the undergraduate level at institutions

¹Presented at the 41st Annual Meeting of the International Association of Milk and Food Sanitarians, Inc., Atlantic City, New Jersey, October 21-23, 1954.

Editorial note: Elsewhere in this issue a proposed model law relating to the registration of sanitarians is published. This model law was prepared by the Committee on Education and Professional Development.

in this country offering public health courses is small. Less than one hundred students are graduated annually from fifteen colleges and universities which offer this type of training. With such a relatively small pool from which to draw, employers must turn to applicants with training in other fields, or must employ persons with little or no applicable educational backgrounds. With these facts in mind it was the judgment of your Committee that scholarships, nominal in amount, could be offered students who demonstrated a leaning toward scientific pursuits, and, at the same time, were in need of financial assistance. Even a scholarship paying as little as one hundred fifty to two hundred dollars annually might serve as a determining factor in a student's choice of a major study area.

c. The International and its many affiliates are composed of men and women representative of persons whose careers are and have been devoted to public service in both official agencies and industry. The contributions of these persons have been outstanding. Those who follow in the normal course of time, to take up where they leave off, must be equally well equipped to continue the essential work in the field of milk and food control so vital to the protection of the public health. Unless plans are set in motion now, and even now may be too late, the present shortage of technically trained people entering the field will become more acute. Even at present there is a serious shortage. A scholarship plan is one means of partially meeting this need.

d. A scholarship plan would serve to publicize milk and food sanitation as a career opportunity yet at the same time fill a void that now exists in the scholarship field. Industry, foundations, and individuals have made grants to colleges and universities to aid the promising yet needy student. To the Committee's knowledge no scholarships have been established to aid students wishing to prepare themselves for milk and food control positions.

With the above mentioned premises in mind, a letter was sent in August, 1954 to all affiliate secretaries outlining the proposal and asking for a favorable vote either

by the affiliate's Executive Board or by the membership assembled at its next regular meeting. The letter suggested an appropriation of Twenty-five dollars (\$25.00) from each affiliate. In the letter the Committee stated that supplementary funds could be contributed by the International to increase the amount to be made available.

Your Committee has been unable to proceed further with this plan at this time, since the majority of affiliates have not indicated what action has been taken. A number of replies have been received from affiliate secretaries expressing a favorable opinion. Several commented that action by the membership would be taken at the next annual meeting. One affiliate secretary made the valuable suggestion that a small assessment per member, deducted from dues, might be a more equitable method of raising funds. This proposal will receive further study by our Committee.

In regard to the second Committee project, the promulgation of a model registration law, this has been accomplished. A copy is attached to this report. This law has been reviewed by legal authority in the home state of one of the Committee members. The legal evaluation of the model law was to the effect that as far as could be determined the Act would be satisfactory for presentation to the legislature of that particular state. It is obvious that any such legislation would have to be scrutinized by the State's Attorney General or similar person in authority before actual legislative introduction.

In drawing this model law it should be emphasized that at this time the International takes a neutral position in regard to legislation of this type. On the other hand, state organizations of their own volition may wish to sponsor a registration act. With this in view your Committee developed a model law strictly as a service measure and in answer to requests from some of the affiliates. It is likewise necessary to state that this model is in no sense the final word in legislation of this type. It has been titled, "Tentative", and this designation should stand until such time as

a number of state affiliates have had experience with it and have had an opportunity to study it in the light of their local situations. Some members of the Committee have raised points which would need reevaluation and revision to meet local requirements. It is important to observe, however, that for the purposes of uniformity a model of this nature has its place. One provision of the Act stipulates reciprocity among those states having enacted a law of equivalent content, force and effect. Any such legislation should make possible a reciprocal interchange of personnel and should never be used as an employment barrier. Copies of the model law are available at this meeting or copies may be obtained by writing the Committee Chairman. The Committee will welcome your suggestions, comments and criticisms.

In summary, your Committee, during 1954 has initiated a scholarship proposal. It is anticipated that within the next few months the action taken by all twenty-six affiliates will be known. It is hoped that by the time of the 1955 annual meeting a detailed report can be given on the plan in actual operation. As the next project a model law has been drawn. As in the case with any model legislation, experience with it over a period of time will be necessary before final judgment can be passed.

Respectfully submitted,
 Dave Jones,
 Washington Assoc.
 Harper Orth,
 Oklahoma Assoc.
 Harold B. Robinson,
 New York Assoc.
 Harry Lindquist,
 Mass. Assoc.
 George White,
 Indiana Assoc.
 W. Howard Brown,
 Florida Assoc.
 J. H. Burkett,
 Iowa Assoc.
 C. F. Hanger,
 Virginia Assoc.
 D. B. Morton,
 Illinois Assoc.
 E. J. Rigby,
 D.V.M. Canada Assoc.
 H. S. Adams, Chairman
 Indiana University
 Medical School
 Indianapolis, Indiana

A PROPOSED MODEL REGISTRATION ACT (TENTATIVE)

The publication of this Tentative Model Law does not by any inference or otherwise indicate its acceptance or rejection by the International Association of Milk and Food Sanitarians, Inc. The "model" in question was drawn as a project by the Committee on Education and Professional Development. It is reproduced in this issue for two reasons, first as representative of a 1954 project completed by the above named committee, and second, to give all IAMFS members an opportunity to study and comment upon it.

At the 41st Annual Meeting the membership voted to instruct the Committee to give the "model law" more study and to submit it for comment and action at the next Annual Meeting.

Comments from members should be sent to H. S. Adams, Chairman, Committee on Education and Professional Development, care of Dept. of Public Health, Indiana University, Medical School, 1100 W. Michigan St., Indianapolis, Indiana.

A bill for an act relating to the preservation and protection of the public health and requiring the registration of professional sanitarians and sanitarians in training; providing for the establishment of a department of registration, and prescribing its powers, duties and functions; dealing with qualifications, appointment, removal and expenses of members thereof; providing for issuance renewal and reinstatement of certificates and fixing fees therefore; authorizing revocation of certificates; providing for expenditure of funds collected under provisions of this act; fixing purposes for which such funds may be used; and providing a penalty.

Be it enacted by the people of the state of

SECTION 1. DEFINITIONS

"Board" means the State Board of Health.

"Department" means the Department of Registration.

"Sanitarian" means a person trained and experienced in the physical, biological, social and sanitary sciences whose duties involve the control of those features of the environment which effect man's health and well being.

"Environmental sanitation" means man's physical surroundings and within it those factors which may adversely influence and effect his health and welfare.

"Sanitarian trainee" means a

person engaged in environmental sanitation who has not fulfilled the experience qualifications prescribed by this Act.

"Certification of Registration" means a document showing the name of the registrant, the date of issue, serial number and the signature of those authorized by this Act to grant it.

SECTION 2. REGISTRATION

In order to safeguard life, health and property and to establish and protect the professional status of persons whose duties in public health and environmental sanitation requires a knowledge of the physical, biological, social and sanitary sciences, the State Board of Health is hereby authorized and directed to establish a Department of Registration for Professional Sanitarians hereinafter called the "Department". It shall be the duty of this Department to carry out the provisions of this Act, except appoint members thereto, review applications for registration, conduct examinations, keep records of its transactions, adopt rules and regulations, conduct hearings, make an annual and financial report and record all matters which appropriately may come before it. These records shall at reasonable times be open to the public.

SECTION 3. PUBLIC FUNDS NOT TO BE APPROPRIATED FOR THE DEPARTMENT

The State of shall in no manner be required to appropriate public funds to the Department to carry out the provisions of this Act.

SECTION 4. APPOINTMENT OF MEMBERS OF THE DEPARTMENT

The State Board of Health shall at the first regular meeting after the effective date of this Act, or as soon thereafter as possible, establish the Department which shall consist of five persons subject to registration under this Act and who are members of the Association of Milk and Food Sanitarians in good standing. Such persons designated as members of the Department by the State Board of Health shall be selected from a list of not less than twelve (12)

names submitted to the Board of Health by the Association of Milk and Food Sanitarians. The members of the first Department shall serve for the following terms: One member for one (1) year, one member for two (2) years, one member for three (3) years, one member for four (4) years, and one member for five (5) years, from the effective date of their appointment, or until their successors are duly appointed and qualified. On the expiration of the term of any member of the Department, The State Board of Health shall appoint for a term of five (5) years a registered professional sanitarian having met the qualifications set forth in this Act, and each member shall hold office until the expiration of the term for which such member is appointed or until a successor shall have been duly appointed and shall have qualified: provided, that any member appointed by the State Board of Health to fill a vacancy in the Department shall be selected from a list of three (3) names of qualified, registered professional sanitarians submitted to the Board by the

..... Association of Milk and Food Sanitarians. The State Board of Health, may remove any member of the Department for misconduct, incompetency, neglect of duty, or for any other just and sufficient cause.

SECTION 5. QUALIFICATIONS OF MEMBERS OF THE DEPARTMENT

Each member of the Department shall be a citizen of the United States, at least thirty (30) years of age, and shall have been engaged in the field of environmental sanitation at least five (5) years at the time of appointment.

SECTION 6. OFFICERS OF THE DEPARTMENT - SEAL - RULES - QUORUM - MEETINGS - SALARIES AND EXPENSES

The members of the Department shall, as soon as appointed by the Board, organize and annually thereafter in the month of June, elect from their number a president, and a secretary who shall be the treasurer. The secretary shall continue in office at the pleasure of the De-

partment. The Department shall have a common seal and it shall make and adopt all necessary rules not inconsistent with this Act, the laws of this State, or of the United States, whereby to perform the duties and to transact the business required under the provisions of this Act, and shall hold at least two (2) meetings each year to review applications for registration as professional sanitarians, hold interviews, review and approve all claims, prepare and approve reports and transact such other business as may be necessary to carry out the provisions of this Act. Three (3) members of the Department shall constitute a quorum and special meetings of the Department shall be called by the Secretary upon written request of any two (2) members; all meetings shall be open to any registered professional sanitarian and to any member of the State Board of Health. The members of the Department shall receive traveling expenses, a per diem allowance not to exceed Ten Dollars (\$10.00) per day for each day actually engaged in official Department meetings; provided that no funds shall be dispersed for such purposes without the approval of the Department: provided that approval and payment of claims for travel, per diem expenses or for any other purposes shall be subject to availability of funds, collected under the provisions of this Act. Funds collected under the provisions of this Act shall be used to pay the expenses of the Department and for such other purposes approved by the Department to improve the professional status of sanitarians registered under the provisions of this Act. An annual audit shall be made of the Department's finances and incorporated in a report to the State Board of Health. Copies of the annual report shall be mailed to all registered professional sanitarians and to all sanitarian trainees.

SECTION 7. RECORD OF PROCEEDINGS.

REGISTER OF APPLICATIONS

The Department shall keep a record of its proceedings, and a register of all applications for registration, which register shall show (a) name, age and place of residence of each applicant; (b) the name and address of the employer or business connection of each ap-

plicant; (c) the date of the application; (d) complete information relative to educational and experience qualifications; (e) the action of the Department; (f) the serial number of the certificate of registration issued to the applicant; (g) the date on which the Department reviewed and acted on the application; (h) such other information as may be deemed pertinent and necessary to the Department.

SECTION 8. APPLICATION FOR REGISTRATION

The Department shall prescribe and provide an application form for the use of applicants. The applicant shall pay at the time of filing with the Department a fee in the amount of Ten Dollars (\$10.00). If the Department finds, upon the basis of evidence submitted and in accordance with the provisions of this Act, that the applicant does not meet registration requirements the entire fee shall be refunded to the applicant submitting it.

SECTION 9. ELIGIBILITY FOR REGISTRATION

The Department shall accept for review the application of any person 21 years of age or more, whose application accompanied by the necessary fee, is submitted. The Department shall carefully evaluate the evidence submitted. The Department shall certify any applicant of good moral character who:

a. held a position in environmental sanitation, not less than six (6) months prior to the effective date of this Act, the appointment to such position being earned through successfully passing a merit system or civil service examination given under the authority of this state or any political subdivision thereof, and provided further the application is received by the Department not later than 90 days after the effective date of this Act.

c. has attended a college or university of recognized standing for not less than two full academic years and who has been gainfully employed in environmental sanitation for a period of not less than three (3) years prior to the date of application, or,

has taken in addition to the full academic year of training, not less than twelve (12) weeks of special training in environmental sanitation as given at a recognized training center or centers conducted by a college or university, or by an appropriate agency of the federal or state government and has been gainfully employed in environmental sanitation for a period of not less than two (2) years prior to the date of application.

d. meets all qualifications for registration as a professional sanitarian as stipulated herein, except qualifications of experience, may, upon making application and paying the necessary fee be granted, upon approval of the Department a certificate of registration as a "Sanitarian Trainee". Such registration shall remain in effect, unless revoked for cause by the Department, for a period not to exceed three (3) years after date of issue.

In cases where academic education, special training courses, experience, or a combination of them may raise reasonable doubt in the opinion of the Department concerning the applicant's capabilities to perform effectively and in the best interest of the public health, the Department, may, cause to be given written or oral examinations and may use other reasonable and objective means to determine whether the applicant meets eligibility requirements for registration.

SECTION 10. RENEWAL OF REGISTRATION— FEE —DELINQUENCY AND REINSTATEMENT

Every professional sanitarian registered under the provisions of this Act who desires to continue in the field of sanitation in this state shall annually pay to the secretary of the Department a renewal fee of Five Dollars (\$5.00). Said fee shall be paid on or before the date to be fixed by the Department for which a renewal registration for the current year shall be issued. Registrations revoked for failure

to pay renewal fees shall be reinstated under rules and regulations adopted by the Department.

SECTION 11. REVOCATION OF REGISTRATION

The Department shall have the power to revoke a registration if it is found that any holder thereof is guilty of unprofessional conduct, the practice of fraud or deceit in obtaining a registration, gross negligence of duty, incompetence in the practice of environmental sanitation, malfeasance, or misfeasance in office; provided, that a registration shall not be revoked until the party in question has had an opportunity to be heard before the Department. The Department shall give notice in writing not less than ten (10) days prior to the date of the hearing, and shall designate the date, time and place of the hearing. Upon presentation of evidence by all parties concerned the Department shall render its decision which shall be final.

SECTION 12. USE OF TITLE
Any person who holds a registration to practice environmental sanitation in this state shall have the privilege of using the title, "Registered Professional Sanitarian", and may use the abbreviation R.P.S. after his name.

SECTION 13. RECIPROCITY
Any person who holds a registration to practice environmental sanitation from any other state in which the legally enacted qualifications for registration are not lower than the qualifications for registration set forth in this Act shall upon application and payment of prescribed fees be accepted for registration as a professional sanitarian.

SECTION 14. PENALTY
It shall be unlawful for any person to represent himself as a registered professional sanitarian or to perform the duties of a registered professional sanitarian, without being duly registered and certified by the Department. Violation of

this section shall be deemed a misdemeanor punishable by fine or imprisonment upon convictions by a court of applicable jurisdiction. (Penalty clause to be added in accordance with State Statutes).

SECTION 15.

This Act shall take effect and be in full force days after its passage and signing by the Chief Executive of this state.

(This model law promulgated in 1954 by the Committee on Education and Professional Development of the INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC. This is a tentative edition and is subject to change based upon subsequent findings, future experience with it or upon recommendations from legal sources.)

H. S. Adams, Chairman
For the Committee on
Education and
Professional Development

COMMITTEES OF THE INTERNATIONAL ASSOCIATION MILK AND FOOD SANITARIANS, INC., FOR 1955

Presented below are the Committees of the INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC., for 1955, together with the objectives of each committee. Members of the Association are urged to study these objectives and to submit their views on any of the subjects being studied to the chairman of the committee concerned.

COMMITTEE ON APPLIED LABORATORY METHODS

OBJECTIVES

To study new laboratory procedures and bacteriological problems of current interest to milk and food control authorities, to evaluate both published and unpublished data, and to present conclusions which will be helpful to the sanitarian in the conduct of his work.

MEMBERS

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Union Stock Yards
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COMMITTEE ON BAKING INDUSTRY EQUIPMENT

OBJECTIVES

The objectives of this Committee are to provide consultative assistance to the Baking Industry Sanitation Standards Committee in the development of standards for items in the Baking Industry.

MEMBERS

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Armin Roth
Health Department Relations
Technical Service Dept.
J. B. Ford Division
Wyandotte Chemicals Corp.
Wyandotte, Michigan

COMMITTEE ON COMMUNICABLE DISEASE AFFECTING MAN

OBJECTIVES

To study problems related to those diseases communicable to man through the consumption of foods, including milk and milk products, meat, poultry, and shellfish, and to recommend specific measures that can be taken by the sanitarian to control such diseases.

MEMBERS

Dr. R. J. Helvig, *Chairman*
Milk, Food and Shellfish
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Division of Sanitary Engineering
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Mr. T. E. Sullivan
Director of the Division of
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Indiana State Board of Health
1330 W. Michigan Street
Indianapolis 7, Indiana

COMMITTEE ON DAIRY FARM METHODS

OBJECTIVES

To study dairy farm methods and procedures, to determine the sanitary problems involved, and to make recommendations for the solution of such sanitary problems, and for the improvement of dairy farm methods which have a relationship to the sanitary quality of milk.

MEMBERS

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Smith Tower
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Alex G. Shaw
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COMMITTEE ON EDUCATION AND PROFESSIONAL DEVELOPMENT

OBJECTIVES

First, to develop plans and to devise methods whereby the Sanitarian can more fully gain recognition as a professional worker in public health and in the field of environmental sanitation; and secondly, to recommend standards of education, training, and experience designed to establish desirable professional qualifications to the end that the title Sanitarian will denote adequate preparation for professional work and attainment.

MEMBERS

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University of Indiana
Indianapolis, Indiana

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Dairy and Food Division
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William Miller
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Lyle Searing
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University of Georgia
Athens, Georgia

George White
Evansville-Vanderburg Health
Department
Evansville, Indiana

Dr. James White
Department of Dairy Industry
Cornell University
Ithaca, New York

COMMITTEE ON FOOD EQUIPMENT

OBJECTIVES

To participate with other health organizations and industry in the formulation of sanitary standards for food equipment. Specifically, the functions of this Committee include: (1) cooperation with other health agencies and industry, under the auspices of the National Sanitation Foundation, in the joint development of NSF Standards for Food Service Equipment; (2) when directed by the Executive Board, to cooperate with other health groups and industry in the development of sanitary standards for food equipment; and (3) to present to the membership at the annual meeting those standards which the Committee recommends be endorsed or approved by the Association.

MEMBERS

William V. Hickey, *Chairman*
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James Westbrook
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COMMITTEE ON FROZEN FOOD SANITATION

OBJECTIVES

To study conditions and practices within the frozen food industry, to determine the sanitary problems involved which might contribute to a public health hazard, and to make recommendations for the solution of such problems.

MEMBERS

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Darold W. Taylor
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Dr. Kenneth Weckel
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Industries
University of Wisconsin
Madison, Wisconsin

COMMITTEE ON MEMBERSHIP

OBJECTIVES

To make every effort to increase the membership of the organization by bringing to the attention of all qualified persons the advantages of belonging to the INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC., and to interest state milk and food sanitarians' organizations in the advantages of affiliation with the INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC.

MEMBERS

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Professor of Animal Husbandry
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Magaguez, Puerto Rico

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Seattle 4, Washington

COMMITTEE ON ORDINANCES AND REGULATIONS PERTAINING TO MILK AND DAIRY PRODUCTS

OBJECTIVES

To review and study the provision of sanitary ordinances and

regulations pertaining to milk, milk products, and frozen desserts, to evaluate data on research findings relative to the sanitary and public health significance of the specific requirements of ordinances and regulations, and to prepare for submission to the members of the Association recommendations for changes in existing ordinances and regulations.

MEMBERS

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Livestock and Livestock Products
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Milk Division and Food Control
of Sanitary Engineering
Mississippi State Board of Health
Jackson, Mississippi

Stephen J. Wolff
Pevely Dairy
St. Louis, Missouri

COMMITTEE ON RECOGNITION AND AWARDS

OBJECTIVES

This Committee is charged with the responsibility of implementing those objectives of the Association concerned with (1) recognition of individual milk and food sanitarians whose achievements have contributed greatly to the public health and welfare of their communities, and (2) recognition of those members of the Association who have through distinguished service contributed greatly to the professional advancement, growth and reputation of the INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC.

The Committee receives and reviews nominations for the annual Sanitarian's Award, and has full responsibility for the selection of the recipient. The Committee also receives and reviews recommendations on candidates for the annual Citation Awards, and counsels with the Executive Board relative to the selection of the recipients. It is also responsible for handling all matters pertaining to the presentation of awards, publicity, and other related items.

MEMBERS

John D. Faulkner, Chief, *Chairman*
Milk, Food and Shellfish
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Division of Sanitary Engineering
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George H. Steele
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515 State Office Building
St. Paul, Minnesota

COMMITTEE ON RESOLUTIONS

OBJECTIVES

To present for consideration at the annual business meetings matters on Association policy and matters wherein the Association can make known its official position with respect to proposals affecting (1) the work of professional sanitarians, and (2) the health of the people of the nation.

MEMBERS

Harold J. Barnum, *Chairman*
Denver Department of Health and
Hospitals
West 6th and Cherokee
Denver 4, Colorado

H. Clifford Goslee
State Dairy and Food
Commissioner
256 Palm Street
Hartford 12, Connecticut

Russell R. Palmer
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Detroit 26, Michigan

COMMITTEE ON SANITARY PROCEDURES

OBJECTIVES

To participate jointly with the Sanitary Standards Subcommittee of the Dairy Industry Committee and the Milk and Food Branch of the U. S. Public Health Service in the formulation of 3A Sanitary Standards for Dairy Equipment. Specifically the functions of this Committee are (1) to receive, consider, and comment on proposed sanitation standards for dairy equipment submitted by the Sanitary Standards Subcommittee, (2) to bring to the attention of the Sanitary Standards Subcommittee items of dairy industry equipment and methods for which formulation of sanitary standards appear desirable, and (3) to cooperate with the Dairy Industry Committee, the U. S. Public Health Service, and health officials in attaining universal acceptance of the sanitary standards upon which mutual agreement has been reached.

MEMBERS

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Jackson, Mississippi

3-A SANITARY STANDARDS FOR INLET AND OUTLET LEAK PROTECTOR PLUG VALVES FOR BATCH PASTEURIZERS

Formulated by
INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC.
UNITED STATES PUBLIC HEALTH SERVICE
THE DAIRY INDUSTRY COMMITTEE
October 8, 1954

It is the purpose of the IAMFS, USPHS, and DIC in connection with the development of the 3-A Sanitary Standards program, to allow and encourage full freedom for inventive genius or new developments. Leak protector plug valve specifications which are developed and which so differ in design, material, construction or otherwise, so as not to conform with the following standards, but which in the opinion of the manufacturer or fabricator are equivalent or better, may be submitted at any time for the consideration of IAMFS, USPHS, and DIC.

MATERIAL:

1. These valves shall be constructed of dairy metal consisting of stainless steel, nickel alloy, or equally corrosion-resistant material, that is nontoxic and nonabsorbent.

DESIGN:

1. The design of leak protector valves shall conform to the recommendations set forth in Section 7, item 16p (b) (3) and Appendix G of the Milk Ordinance and Code—1953 Recommendations of the Public Health Service. An abstract of these requirements follows and drawings of acceptable valves are appended to this standard. (See "APPENDIX" [1]).

(a) All leak protector valves shall be provided with leak diverting grooves which when the valve is in a closed position, will prevent leakage past the valve either by way of the valve seat or the plug channel. A closed position shall mean any position of the valve seat which stops the flow of milk into or out of the holder. It includes the "just-closed" position, which means that closed position of the plug in which the flow into or out of the holder is barely stopped or any closed position within 5/64-inch thereof as measured along the maximum circumference of the valve seat. It also includes the "fully-closed" position, which means the closed position of the valve

seat which requires the maximum movement of the valve to reach the fully-open position, and all positions between the "just-closed" and "fully-closed" position. Leak-protector grooves must begin to function within 5/64-inch after the "just-closed" position is passed, in closing.

(b) All leak-protector grooves shall be at least 3/16-inch wide, and at least 3/32-inch deep at the center. Mating grooves shall provide these dimensions throughout their combined length whenever the valve is in, or approximately in, the "fully-closed" position. All single-leak grooves, and all mating leak grooves when mated, shall extend throughout the entire depth of the seat, so as to divert leakage occurring at all points throughout the depth of the seat, and so as to prevent air bindings. Washers or other parts shall not obstruct leak-protector grooves.

(c) All leak-protector valves shall be provided with a stop to guide the operator in closing the valve so that unpasteurized milk may not inadvertently be permitted to enter the outlet line or the holder. The stop shall be so designed that the plug will be irreversible when the plug is provided with any grooves or their equivalent, unless duplicate, diametrically opposite grooves are also provided. In the case of 2-way, plug-type valves (i.e., those having only one inlet and one outlet), a 180° stop, or any combination of stops permitting two fully-closed positions, may be substituted for a 90° stop, provided that there are no air-relief grooves in the plug and that all leak grooves are located symmetrically with respect to the valve inlet. Stops shall be so designed that the operator cannot turn the valve beyond the stop position, either by raising the plug or by any other means.

A valve stop means a guide which permits turning the valve plug to but not beyond the fully closed position. A 90° stop means a stop so designed as to prevent turning the

plug more than 90°. A 180° stop means a stop which prevents turning the plug more than 180°. A valve with an irreversible plug shall mean one in which the plug cannot be reversed in the shell.

(d) Leak-protector inlet valves shall be provided with grooves to provide air-relief to the inlet line to the holder when the valve is in any closed position.

(e) Leak-protector outlet valves shall be so designed as to prevent the accumulation of unpasteurized milk in the milk passages of the valve when the valve is in any closed position.

(f) Leak-protector outlet valves shall be so designed that the combined length of the inlet passage in the shell and of any passage of corresponding diameter in the pasteurizer does not exceed the diameter of the passage in the valve.

CONSTRUCTION:

1. All milk contact surfaces shall be finished to an equivalent of not less than 120 grit properly applied.

2. All parts having milk contact surfaces shall be readily removable or shall be accessible for cleaning and inspection. All exterior surfaces shall be smooth, easily cleanable, and self-draining.

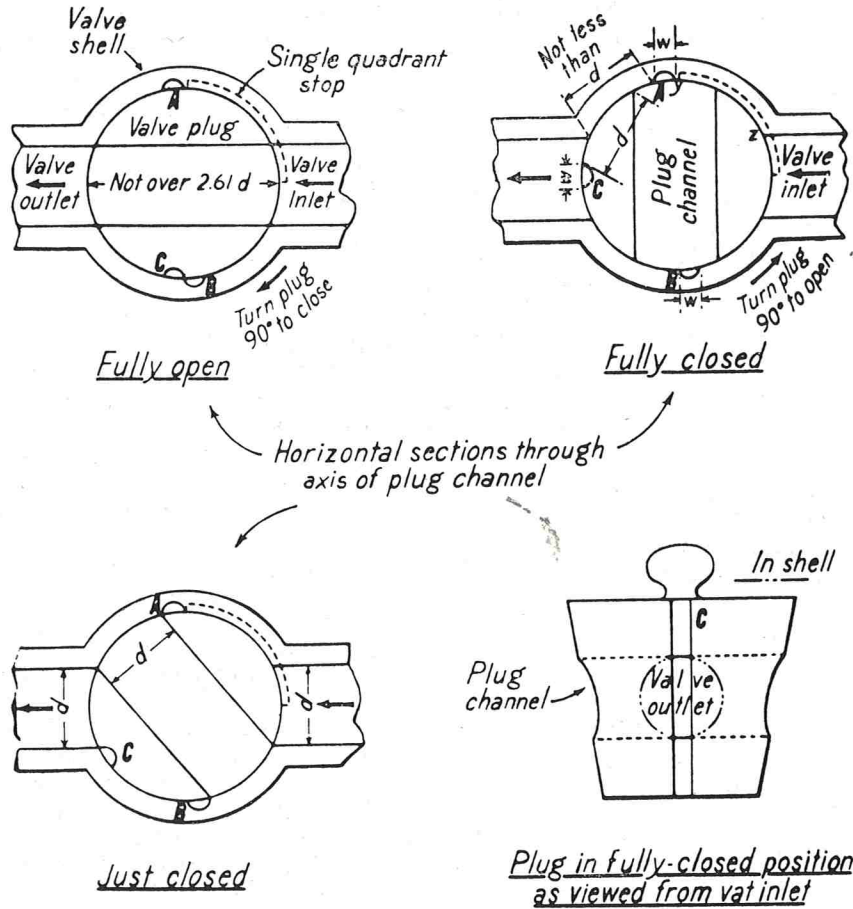
3. The diameter of the milk passage and the dimensions of the sanitary thread and of the fitting seal shall conform with the standards established for the similar counterpart in the "3-A Standards for Fittings Used on Milk and Milk Products Equipment and Used on Sanitary Lines Conducting Milk and Milk Products".

4. The stop may be cut or cast in the body and/or plug. If a stop pin is used, it shall have:

(a) A minimum shear strength of 30,000 P.S.I.

(b) The pin shall be attached with a thread having a Class 3 fit and a minimum length of 1/2 inch.

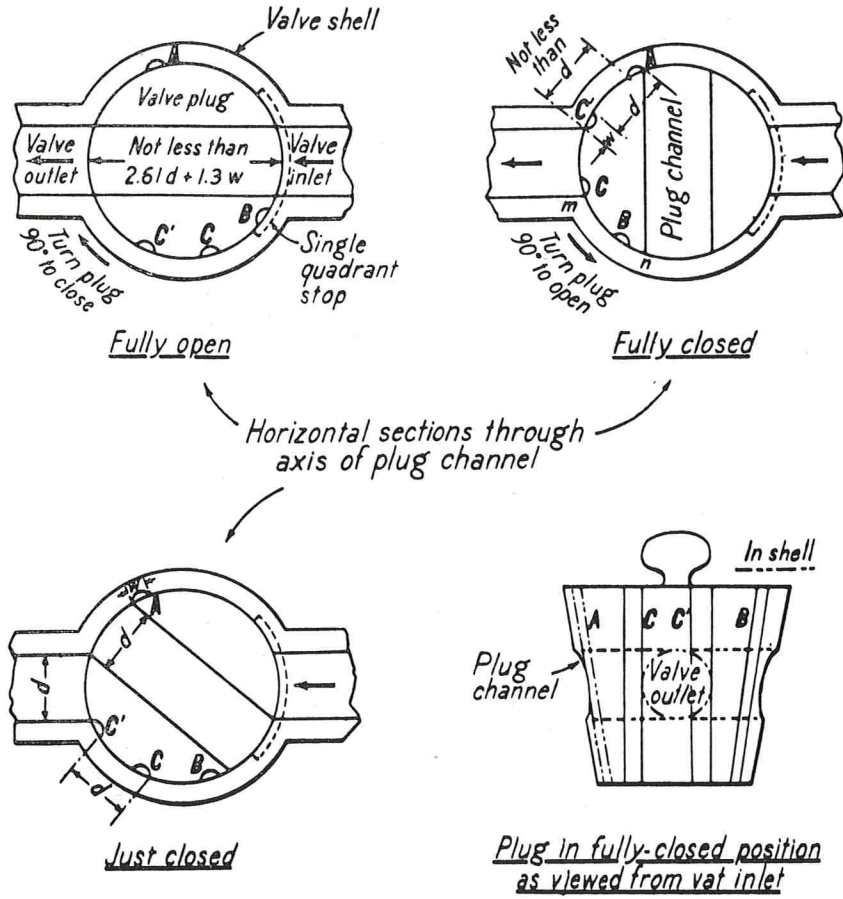
(c) The pin shall have a minimum diameter of not less than 5/16-inch O.D. throughout its entire length except at root of thread at threaded end.



Notes: A and B are leak-protector grooves. C is an air-relief groove. All grooves are full length, but upper or lower half of C may be omitted.

W = not less than 3/16"

**TWO-WAY PLUG-TYPE INLET VALVE
(DESIGN - A)**



Notes: A and B are leak-protector grooves. C and C' are air-relief grooves. All grooves are full length, but upper or lower halves of C and C' may be omitted.

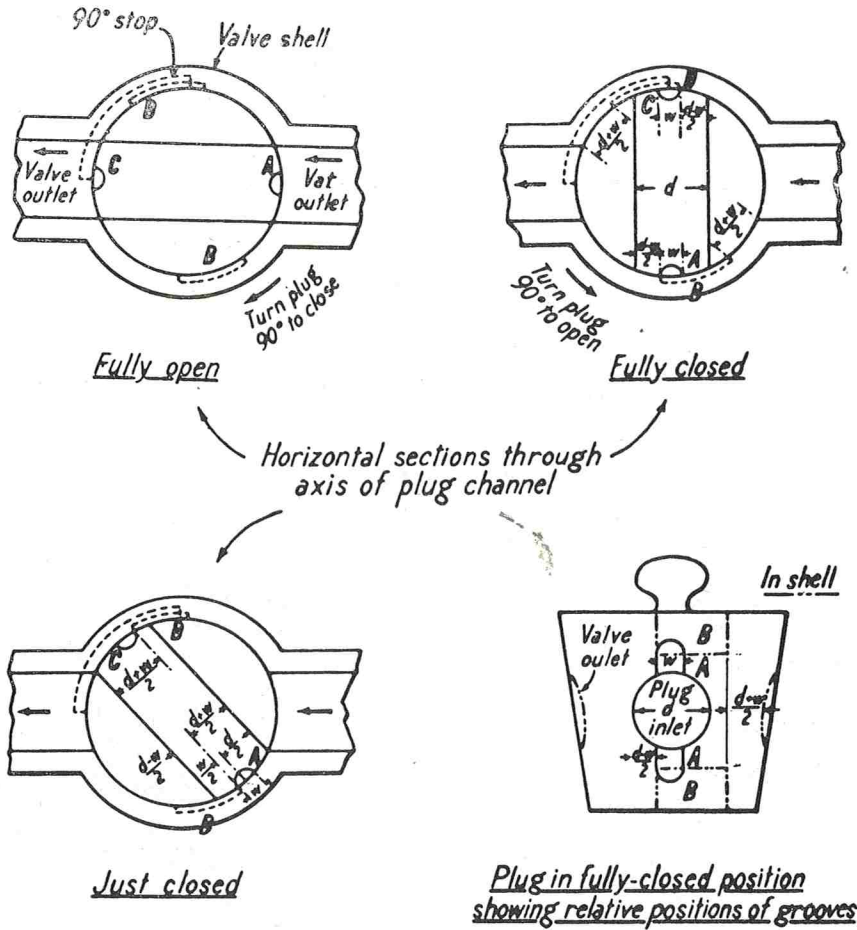
W = not less than $\frac{3}{16}$ "

**TWO-WAY PLUG-TYPE INLET VALVE
(DESIGN-B)**

SANITARY FITTINGS

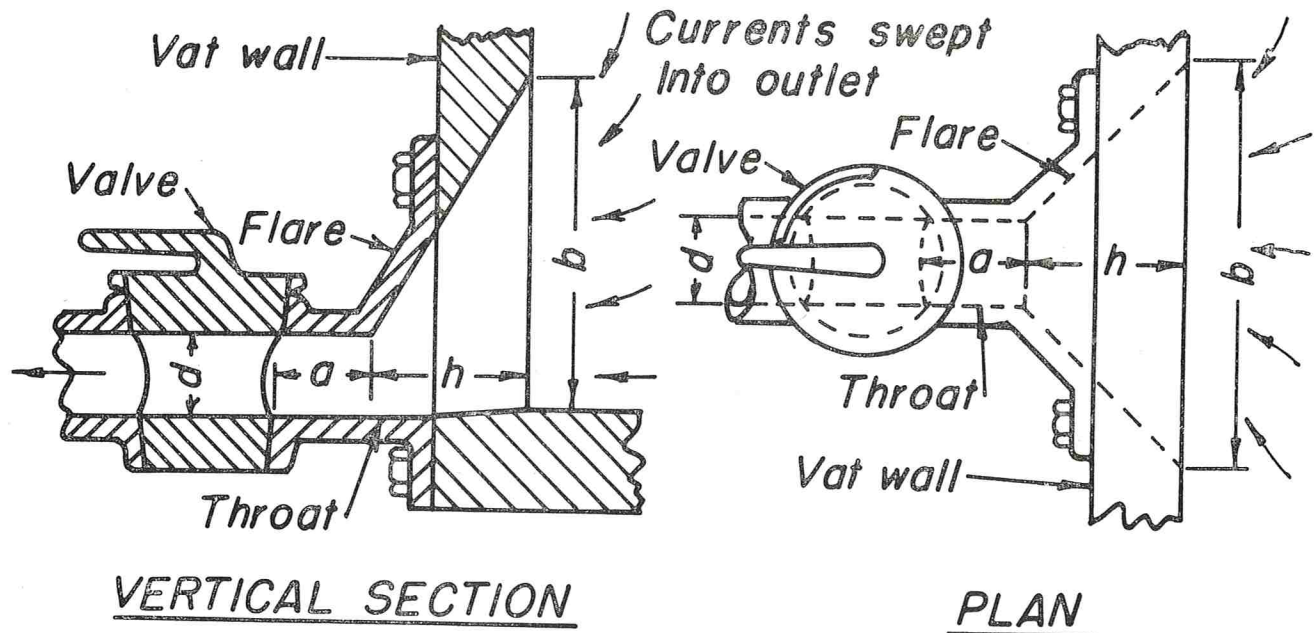
3-A STANDARD

3-A-100-17



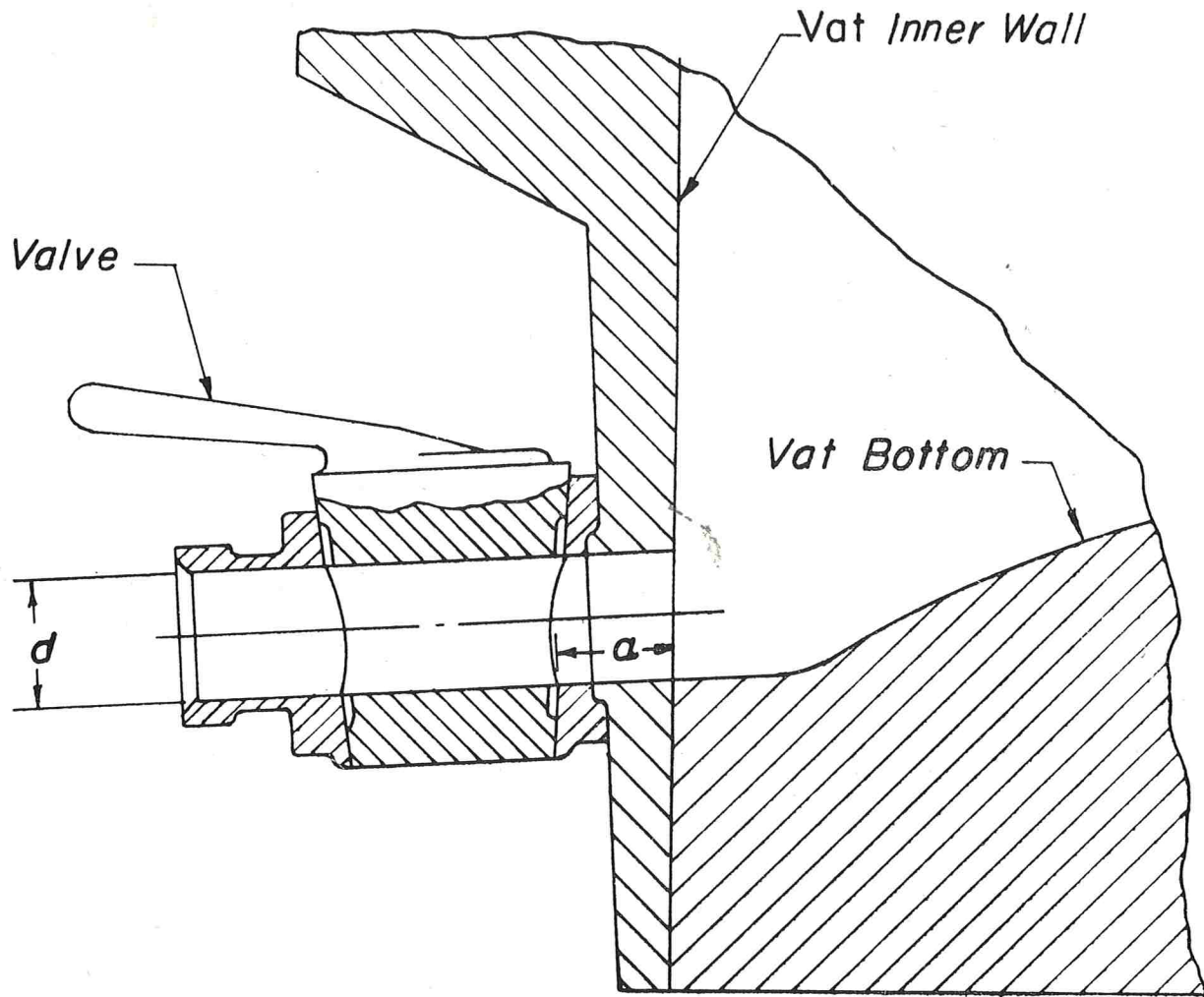
Notes: A, B, C, and D are leak-protector grooves. A extends part way in the plug and mates with B (in upper and lower shell) in all closed positions. Grooves C and D are diagonally opposite A and B.
W = not less than 3/16"

**PLUG-TYPE SIDE-OUTLET VALVE
(DESIGN-E)**



NOTE: Close-coupled side-outlet valve connected to holder, showing design requirements. d = diameter of outlet. h = depth of flare. a = greatest distance from valve seat to small end of flare (shall be not more than d .) b = smallest diameter at large end of flare (shall be not less than $h + d$.)

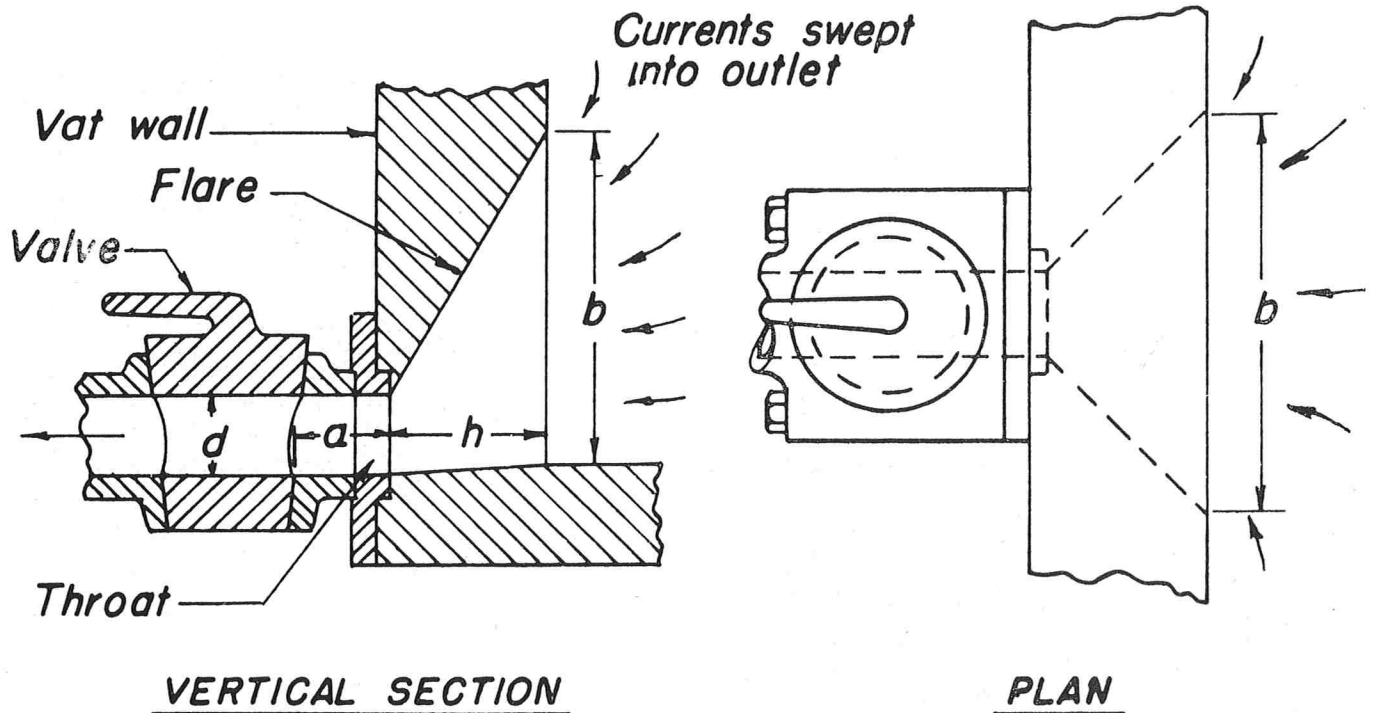
**CLOSE-COUPLED SIDE-OUTLET VALVE
(DESIGN-D)**



NOTE: Close-coupled side-outlet valve connected to holder, showing design requirements. d = inside diameter of outlet valve. a = greatest distance from valve seat to vertical side of inner wall. (In no case shall it exceed d .) No flare required for reason that a is less than d .

**CLOSE-COUPLED SIDE-OUTLET VALVE
(DESIGN-D ALTERNATE)**

SANITARY FITTINGS
3-A STANDARD
3-A-100-20



NOTE: Close-coupled Side-outlet valve connected to holder, showing design requirements. d =inside diameter of outlet. h =depth of flare. a =greatest distance from valve seat to small end of flare. (Shall not be more than d .) b =smallest diameter at large end of flare (shall not be less than h plus d)

**CLOSE-COUPLED SIDE -OUTLET VALVE
(DESIGN-D ALTERNATE)**

SANITARY FITTINGS
3-A STANDARD
3-A-100-21

(d) The pin shall be made of material that will withstand the repeated impact that occurs in continued operation without breaking or becoming sufficiently distorted

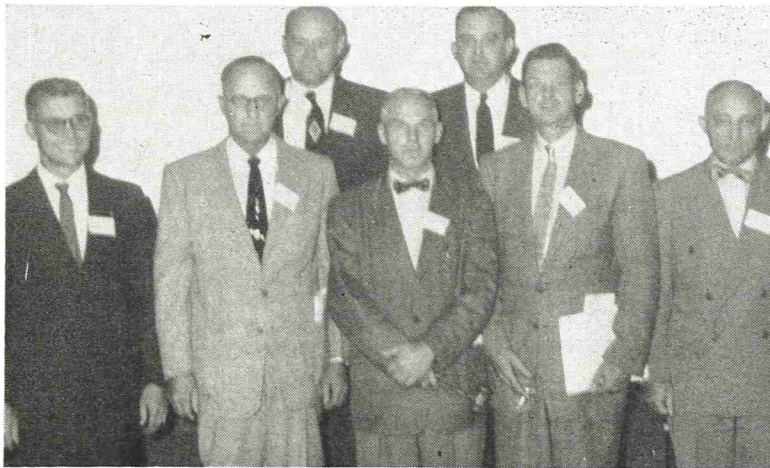
to cause improper register of the leak protector ports.

5. The handle of the valve shall be at right angles to the direction

of flow when in fully closed position. If valve handle is so positioned as not to be at 90° when fully closed, the valve shall be marked to show the fully closed position.

APPROVED BY:

<i>C. A. Abele</i>	<i>October 25, 1954</i>
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<i>John D. Faulkner</i>	<i>October 25, 1954</i>
John D. Faulkner, Chief - MF, DSES, USPHS	Date
<i>E. H. Parfitt</i>	<i>Oct 25 1954</i>
E. H. Parfitt, Chairman - SSS-DIC	Date
<i>George W. Putnam</i>	<i>Oct 25, 1954</i>
George W. Putnam, Chairman - Tech. Committee DISA	Date



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NEWS AND EVENTS

DOOR PRIZES GIVEN AT ANNUAL MEETINGS

As has been the custom in recent years, door prizes were awarded at the beginning of each of the morning and afternoon sessions during the annual meeting of the Association at Atlantic City. Twenty-one prizes were available, nineteen donated by affiliate associations and two by industry organizations. The committee in charge of assembling the prizes and all details involved in supervising the drawings and in making the awards consisted of C. M. Moss, *Chairman*, Dr. Charles Tivak and Dr. Howard Ragsdale. The following is a list of the organizations that contributed prizes, the prizes and the recipients.

DONOR	PRIZE	RECIPIENT
Conn. Assoc. of Dairy and Milk Sanitarians	Hairbrush and Comb	C. H. Holcombe St. Paul, Minn.
Missouri Assoc. of Milk and Food Sanitarians	Ham	W. L. McLead Durham, N. C.
Rocky Mt. Assoc. of Milk and Food Sanitarians	Ten Trout	Vernon Nickel Crystal City, Mo.
Pa. Dairy Sanitarians Assoc.	One Gallon Maple Syrup	Ken Brown Mayville, N. Y.
Dairy Sanitarians Assoc. of the Del-Mar-Va. Peninsula	Assorted Oyster Products	Tom Kamelas New Brunswick, N. J.
Minn. Milk Sanitarians Assoc.	Five Lb. Wheel of <i>Nuworld</i> Cheese	Ray Kummerlin Swainsboro, Ga.
Abbotts Dairies Philadelphia, Pa.	Three Pound Box of Mushrooms	T. E. Sullivan Indianapolis, Ind.
Fla. Assoc. of Milk Sanitarians	One Bushel of Oranges	S. M. Major Macon, Ga.
Ia. Assoc. of Milk Sanitarians	One Select Iowa Ham	Joe Durbin Louisville, Ky.
N. Y. State Assoc. of Milk Sanitarians	Flash Camera	C. Carson Hartford, Conn.
Sylvan Seal Milk Co.	<i>Red Skin Aged</i> Colby Cheese	Joe Tolley Bristol, Va.
Associated Ill. Milk Sanitarians	Assorted Dry Sausages	Ken Weckel Madison, Wisc.
Conn. Assoc. of Dairy and Milk Sanitarians	Box of Cigars	W. C. Parkinson Utah
Tenn. Assoc. of Sanitarians	Ash Tray	George Wier Chicago, Ill.
Ga. Chapter of the IAMFS	Box of Pecans	Russell Palmer Detroit, Mich.
So. Dak. Assoc. of Sanitarians	Gold Tie Clasp	Franklin Barber Oakdale, L. I.
Va. Assoc. of Milk and Food Sanitarians	Ham	Richard Whitehead Jackson, Miss.
Wash. Milk Sanitarians Assoc.	Bushel of Wash. Apples	C. W. Pegram Raleigh, N. C.
Mich. Assoc. of Sanitarians	Case of Cherries	Harold Richie Chicago, Ill.

Wisc. Milk Sanitarians Assoc.	Cheese	Harry Bremer Montpelior, Vt.
Ind. Assoc. of Milk and Food Sanitarians	Two Box Seats Ind'p'ls. Motor Speedway	J. F. Johnson Muncie, Ind.
Mich. Assoc. of Sanitarians	One Bushel of Apples	George Lee Macon, Ga.

TENTH ANNUAL DAIRY TECHNOLOGY CONFERENCE UNIVERSITY OF MARYLAND, NOVEMBER 9, 10, 11 & 12, 1954

Approximately 230 Dairy Industry men representing Maryland, adjoining states, the District of Columbia and two foreign countries attended the Tenth Annual Dairy Technology Conference at the University of Maryland on November 9, 10, 11 and 12, 1954.

Mr. Don Anderson, Acting Director, Livestock and Dairy Division, U.S.D.A. opened the first day's program with the presentation, "What is the Future of the Dairy Industry?". Mr. Anderson emphasized the nutritional value of dairy products and stated that dairy products in government storage represented a real food asset.

Mr. Walter Hunnicutt used color slides to illustrate his discussion on "Producing Tomorrow's Milk With Grass". He stated that efficient production methods were highly essential in today's dairy industry and that improved grasslands cut milk production costs. He further stated that the grain ration can be reduced and that no purchased protein is needed with excellent legume-grass forage. Mr. Hunnicutt concluded by outlining the rules for making legume-grass silage in horizontal silos. He stressed the importance of proper silo construction through packing and silage covers.

Dr. C. L. Everson explained the Maryland Brucellosis program. He stated that the program would be in full operation by January 1, 1956. The program states in brief that all cattle shall be placed under official supervision, regularly blood tested and reactors removed for slaughter.

Dr. Robert V. Locke, Sanitarian, Maryland Health Department, emphasized the important items in a farm inspection program.

Dr. I. C. Shaw, Dairy Department, University of Maryland, re-

viewed observations of milk producing practices in the Los Angeles, California area. He observed that milk is produced economically by maximum utilization of a small area by virtue of "around the clock milking", heavy feeding and disposal of low producers, sick cows and poor breeders. The sanitation problem is minimized by the use of dry lots and the housing of animals only during the milking period.

Paul M. Gottfried, Paulen Chemical Company, Berwyn, Maryland, talking on "A Recent Development in Dairy Equipment Cleaning", stated that a proper formulation of the non ionics alone will gain much wider acceptance for milkhouse use in the near future. Actual use on thousands of dairy farms has proven a straight non ionic formulation to be one of the most valuable developments for the dairy farmer.

In the farm holding tank panel discussion, J. M. Smathers of the Maryland and Virginia Milk Producers Association presided. Others on the panel were Mr. P. E. LeFevre, Willard S. Holter and Jack S. Conrad of Chestnut Farms Dairy, Lucerne Milk Company and University of Maryland, respectively. Questions regarding various aspects of bulk milk handling were raised from the floor and then answered by the members of the panel. The overall opinion expressed by the group was that bulk milk handling was here to stay and close cooperation between all those concerned is necessary to insure a successful operation.

Dr. Fred J. Babel, Purdue University, presented the address, "Sanitation of Milk and Food Establishments", at the Annual Dinner of Maryland Association of

Sanitarians. He stated that items of importance in inspecting milk and food establishments include: (1) knowledge of laws and regulations, (2) knowledge of bacteriology, (3) knowledge of construction and operation of equipment, and (4) knowledge of detergents and bactericides. He concluded that the sanitarian who is most highly regarded is one who makes known what he expects to accomplish, makes known what is not in compliance with regulations, and discusses those items that are not in compliance with the proper person.

Dr. G. E. Holm, U. S. D. A., spoke on the "Factors Affecting the Spoilage of Milk Fat" and emphasized the importance of low storage upon keeping quality of dairy products.

Dr. Babel discussed "The Effect of Low Temperature Bacteria on the Keeping Quality of Dairy Products". He stated that the dairy industry and the milk producer have more adequate refrigeration now than ever before. However, refrigerated dairy products are not the solution to all bacteriological problems. Proper cleaning and sterilization of equipment is just as important now as it was some time ago and perhaps even more important.

Mr. Ralph A. Eastwood emphasized the importance of putting more dairy foods on family tables. He stressed the vast job the National Dairy Council is performing to this end. Illustrated material was presented showing the particular food needs of different population groups. Information for children under nine years of age must be presented in a manner easily understood by this impressionable age group. Teenagers must be appealed to in still another "tone of voice". Different material is prepared for groups such as expectant mothers, middle-aged people, and adults over 55 years of age.

In the afternoon session of the second day of the conference, Professor S. J. Weese, Professor of Dairy Manufacturing, University of West Virginia, presented a discussion on "Some Factors Influencing the Flavor of Milk". He stated that milk plant operators should be vitally concerned in the flavor of milk. Flavor controls to a large

extent the quantity consumed. We all know that the per capita consumption of milk and milk products is too low from a health standpoint. By improving the flavor of milk, we can increase its consumption, help the dairy industry and improve the health of the nation.

"The Manufacture of Quality Buttermilk" was discussed by N. C. Angevine, Director of Laboratory Division, Meyer-Blanke Company, St. Louis, Missouri. Later in the week, he conducted a two day cottage cheese and buttermilk demonstration and clinic.

Mr. Angevine stated that it was difficult to find two plants using the same methods in manufacturing these products. He said that buttermilk is the most profitable item a dairy sells, fits in with today's weight-reducing nutritional trend. Buttermilk is a rich source of protein, furnishes a good share of vitamins, and compared with whole milk, contains more minerals, such as calcium, phosphorous, iron, etc. Buttermilk is a very important food product because through controlled bacteriological fermentation, the proteins are broken down so that they are more easily and readily digested. Most people, even babies, can consume buttermilk with less digestive trouble than sweet milk—it's a good food—let's make a good, uniform quality product.

The panel on "Automatic Vending of Dairy Products", under the capable moderation of Dr. G. M. Beal, University of Maryland, was ably discussed by Dr. S. Krause, U.S.D.A.; Mr. D. E. Walters, Ideal Dispenser Co.; and Mr. Meyer Gelfand, G. B. Macke Corporation.

Dr. Krause pointed out that research findings indicate more sales in milk through vending machines. Mr. Walters' discussion concerned advertising milk as a refreshing as well as nutritious food, he pointed out that through vending machines, milk is and can be made available to the adult at times he normally would not get it, i.e. 8 to 12 a.m. and 1 to 5 p.m. Mr. Gelfand restricted his talk to the vending machine owner's and operator's viewpoint. He felt that milk sold to the vending machine operator should be in a special price class because the operator is opening up new markets for the dairyman. Also,

rather than have the dairyman buy and operate the vending machine, he felt it is more economical to have only one operator of all the machines in a given spot. This enables better servicing.

At the joint banquet meeting with the Dairy Technology Society of Maryland and the District of Columbia, a life membership was presented to Dr. C. W. England along with an Honorary Scroll signed by seventeen past presidents.

Scholarship awards were presented by the Society to Six University of Maryland Dairy Technology students, in recognition of their achievements in the field of dairy technology: Frederick Heffner, Conrad Hemphill, David Kuhn, Robert Nicodemus, Walter Kinsey and Donald Dilg.

Dr. W. E. Petersen of the University of Minnesota, guest speaker for the occasion, spoke on "Frontiers of Human Nutrition in Relation to Milk". In his talk, Dr. Petersen challenged the dairy industry to review its processing methods and legal regulations in the light of our present knowledge. He suggested the replacement of antiquated procedures and regulations with systems which will provide products more acceptable to the consumer. Low fat milks and more complete nutrient fortification were among the items mentioned. With improved quality and flavor, dairy products can surpass their present position of esteem as a human food.

ICE CREAM SHORT COURSE

The Sixth Annual Ice Cream Short Course will be held at the University of Maryland. The classes will begin on January 17 and continue through January 26. The course will cover most phases of ice cream manufacture including mix calculations, laboratory control, standardization, mix manufacture, freezing and storage of ice cream, flavors and flavor materials, plant maintenance and dairy plant housekeeping and sanitation. Additional material covering the course may be obtained by writing the Dairy Department, University of Maryland.

NEW SINGLE SERVICE MILK SAMPLING TUBE

A new low cost single service disposable tube and container has been developed by the Bacti-Kit Company, 2945 Hilyard Street, Phone 4-4182, Eugene, Oregon with patent pending.

The single service feature has been well received by those in the industry who have seen it in use, particularly grade "A" dairies with farm tanks where sampling is done on their premises. Personal observation of the sanitarian or field representative disposing of the used tube encourages confidence in the reliability of bacteria counts.

The sample tubes are packaged in a heat resistant paper container containing 25-24 inch sampling pipettes which are dispensed one at a time through a specially designed cap which may be closed by turning to prevent contamination of unused tubes.

Bacti-Kit tubes may also be used by farm tank pick-up trucks in sampling for butter fat with the advantages of convenience, always dry, sanitary container between stops, and when properly used at the same depth in tank will deliver a more representative sample of milk. This is particularly important when the volume of milk is not always the same or when there is a question as to whether the milk is thoroughly mixed.

Sample kits are marketed after sealing and sterilizing in an approved manner with certified photostatic copies of recording charts available should actual proof become necessary. The tubes may be reesterilized if desired by autoclaving in accordance with Standard Methods for Examining Dairy Products.

The Bacti-Kit has been used by an inspection agency for over one year with favorable results. They report a saving because of the no rewash or reesterilize features; and also feel that the tubes are a definite improvement in sampling technique.

The company also has available a single service tube $\frac{1}{4}$ " O.D. and $8\frac{1}{2}$ " long individually wrapped, sealed, and sterilized to serve dairy operations that transfer cultures.

HELPFUL INFORMATION

Editorial Note: Listed below are sources of information on a variety of subjects. Requests for any of the material listed should be sent by letter or post card to the source indicated.

Packaging Materials for the Fresh Produce Industry. Available from Sylvania Division, American Viscose Corp., 1617 Pennsylvania Blvd., Philadelphia 3, Pa.

An Improved Method of Pricing Fat and Nonfat Solids in Milk. N. T. Pritchard, U. S. Dept. of Agriculture, Agricultural Marketing Service, Washington, D. C.

Estimating the Solids-Not-Fat Content of Milk. Marketing Res. Report No. 65, U. S. Dept. of Agriculture, Agricultural Marketing Service. Available from Supt. of Documents, Washington, D. C. 10 cents.

Antiseptics, Disinfectants, Fungicides and Chemical and Physical Sterilization. (New book) Edited by G. F. Reddish. Lea and Febiger, 600 Washington Square, Philadelphia, Pa., 1954. 841 pp., \$15.00.

Marketing Eggs. R. R. Slocum and J. W. Kingborne, U. S. Dept. of Agriculture, Farmers Bulletin No. 1378. Available from Supt. of Documents, Washington, D. C. 25 cents.

Sampling Routines and the Accuracy of Patrons' Butterfat Tests. Louis F. Herrmann, et al. Marketing Research Report No. 66, U. S. Dept. of Agriculture, Agricultural Marketing Service, Washington, D. C.

Practice of Sanitation. (New book) Edward Scott Hopkins and Wilmer Henry Schulze. (2nd Ed.) Baltimore, Md., Williams and Wilkins, 1954. 466 pp. \$8.00.

Uses of Sodium Benzoate in Foods; Organic Chemicals Division, Monsanto Chemical Co., Box 478, St. Louis, Missouri.

Barriers to the Interstate Movement of Milk and Dairy Products in the Eleven Western States. Bulletin 255. April, 1954. University of Arizona, Agricultural Experiment Station, Tucson, Arizona.

Corn in Industry. Corn Industries Foundation, 3 East 45th St., New York, N. Y.

Changes in Bacterial Population and Characteristics of Bottled Market Milk During Refrigerated Holding. Bulletin 575, The Pennsylvania State University, College of Agriculture, State College, Pa.

Repertoire. A list of amateur color movie pictures with personal narration when projecting. For further information write: C. B. A. (Bill) Bryant, (Filter Products Division, Johnson and Johnson Inc.) Box 455, Montgomery, Michigan.

Klenzade Dairy Sanitation Handbook. Available from Klenzade Products, Inc., Beloit, Wisc. \$2.00 per copy.

COURT PERMITS TAMPA DAIRY MILK SALES IN SARASOTA

A Tampa milk distributor recently won a legal battle in Sarasota Court against a Sarasota City Health Department order prohibiting the Tampa milk from distribution in Sarasota.

The prohibition against the Tampa firm's milk was based on a Sarasota ordinance requiring all raw milk processed for sale in the city to have a bacteria count of not over 50,000.

The Tampa plant contended that all milk processed for distribution in Sarasota met the requirements of the law although the milk from some of their producers was over the 50,000 limit but within the legal 200,000 limit acceptable in Tampa. It was argued that the milk meeting the Sarasota requirements was processed separately.

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SANITARIAN: City of Modesto, Calif. \$310 to 376. Calif. registration required before perm. appointment. Write Personnel Office, P. O. Box 642, Modesto, Calif.

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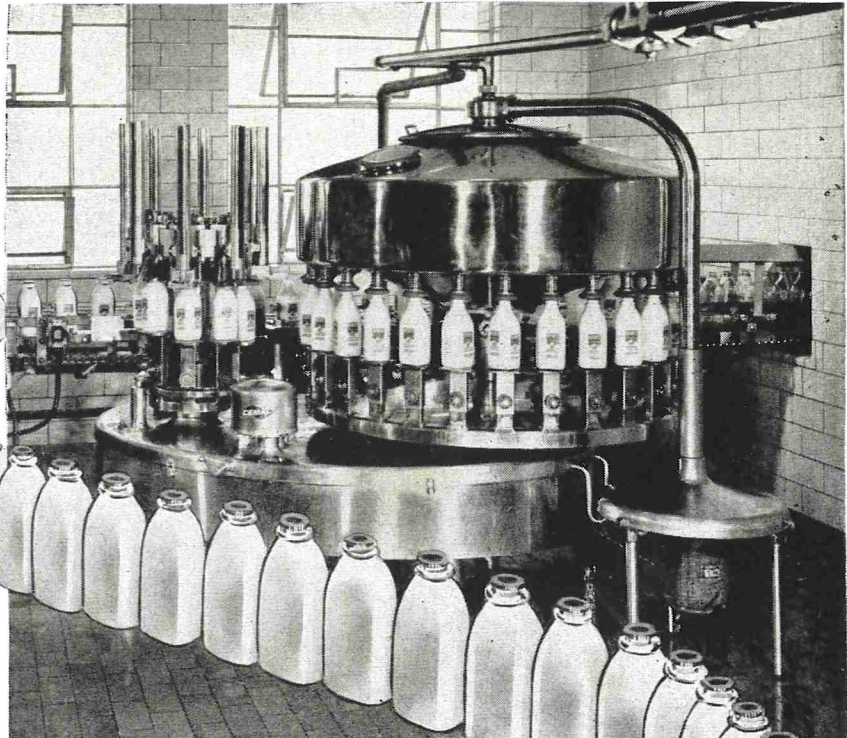
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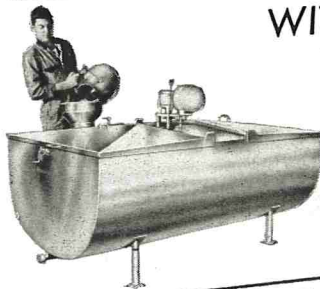
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INDEX TO ADVERTISERS

American Seal-Kap Corp.	II
Babson Bros. Co.	Inside Front Cover
Bacti-Kit Co.	Page 29
Baltimore Biological Laboratory	VIII
Bowey's Inc.	V
Cherry-Burrell Corp.	IV
Creamery Package Mfg. Co.	Inside Back Cover
Crown Cork and Seal Co.	VII
Difco Laboratories	Back Cover
IAMFS	X
Johnson & Johnson	I
Klenzade Products, Inc.	II
Mojonnier Bros. Co.	VIII
Oakite Products Inc.	29
Schwartz Mfg. Co.	VI
Wilson Refrigeration, Inc.	IX

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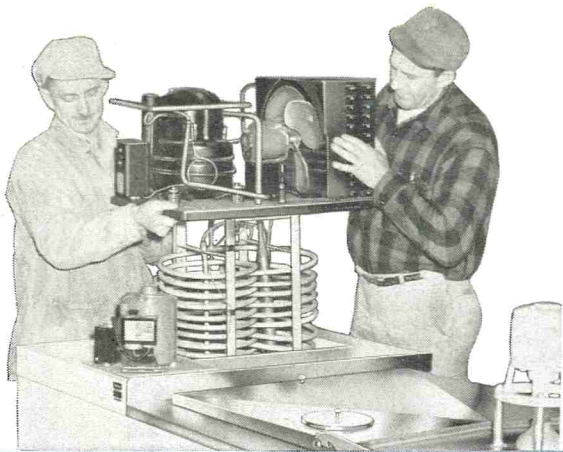
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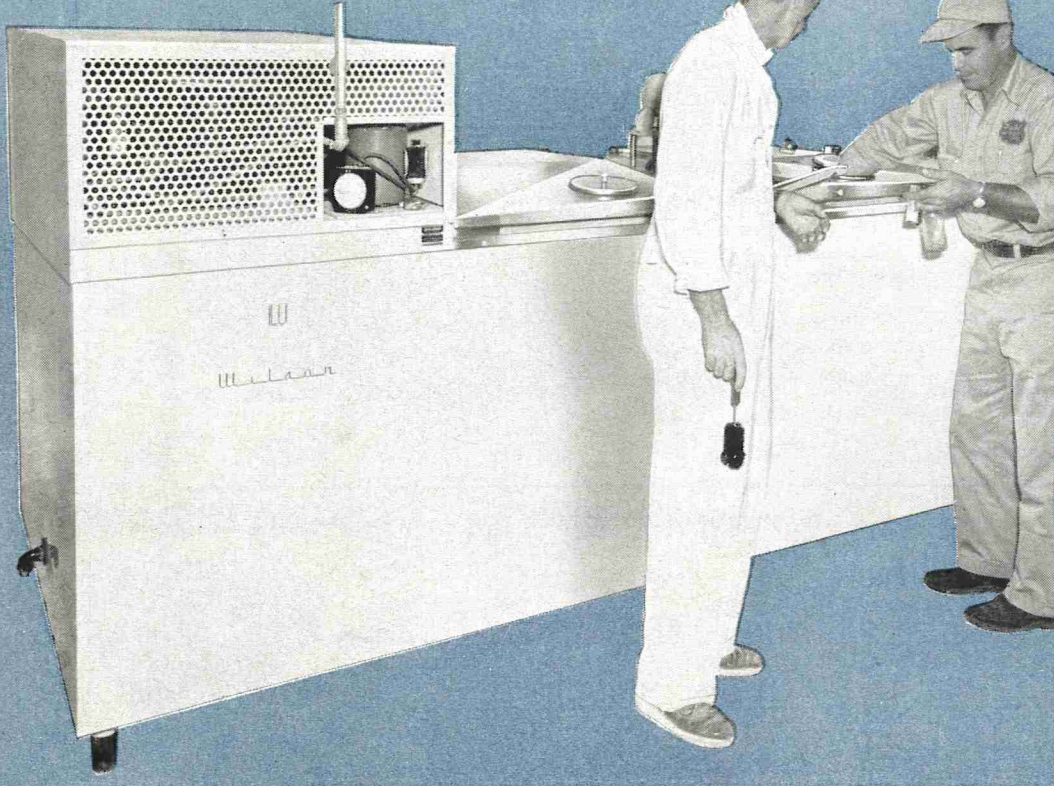


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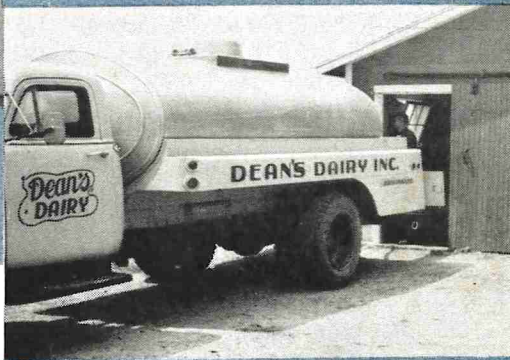
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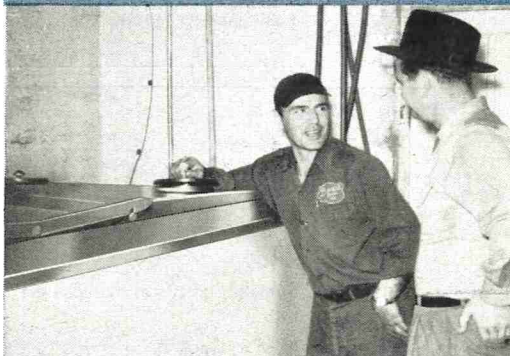


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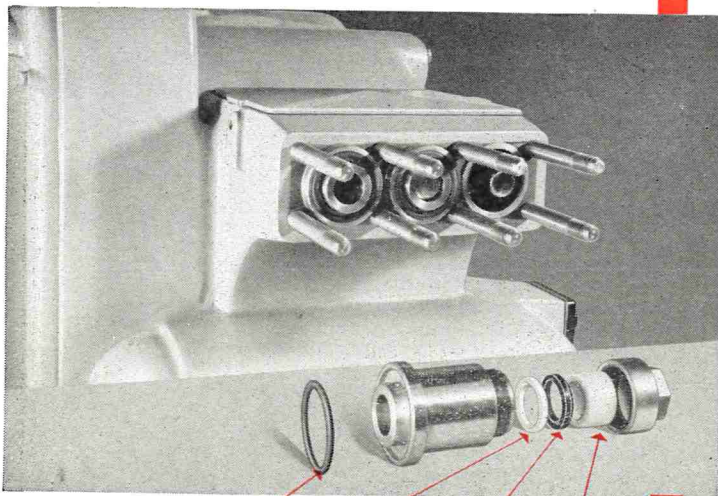
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