

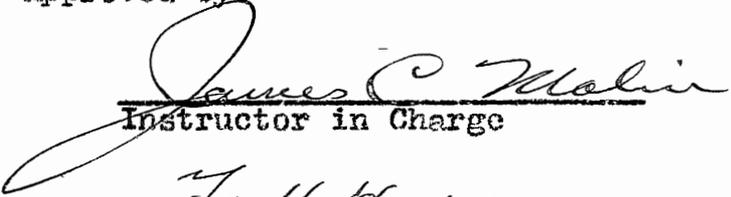
HISTORY
OF
NATIONAL PURE FOOD AND DRUG LEGISLATION IN
THE UNITED STATES TO 1906.

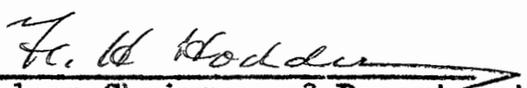
by

Jessie Shillington
A.B., College of Emporia, 1915

Submitted to the Department of
History and the Faculty of the
Graduate School of the University
of Kansas in partial fulfillment
of the requirements for the degree
of Master of Arts.

Approved by:


James C. Molin
Instructor in Charge


F. W. Hodder
Head or Chairman of Department

May 26, 1925.

PREFACE

The purpose of this thesis is to give a brief survey of the problem of adulteration of foods and drugs and to trace the origin and development of national legislation in the United States. In Part I, the special laws are traced to the point where the first general federal legislation was enacted on the subject, and the federal government had accepted the principle of control over these subjects. In Part II is traced (1) the extension of federal control to make it more effective, and (2) the merging of legislation on special subjects into general food and drug legislation.

HISTORY OF NATIONAL PURE FOOD AND DRUG
LEGISLATION IN THE UNITED STATES
TO 1906.

-0-

TABLE OF CONTENTS

Part I.

	(Page)
Chapter I. Pure Food and Drug Problem.	
I. European Background - - - - -	1
1. Introduction - - - - -	1
2. Work of Accum and Hassall - - - - -	2
3. Some Adulterations in England - - - - -	5
4. Legislation in Europe - - - - -	7
II. American Background - - - - -	9
1. Introduction - - - - -	9
2. Some Adulterations in the United States	10
3. Legislation in States to 1890 - - - - -	12
Chapter II. Drugs.	
I. Pharmacy in the United States - - - - -	14
II. Pharmacopoeia - - - - -	14
III. Problem of Adulteration of Drugs - - - - -	15
IV. Legislation on Drugs - - - - -	17
1. Legislative History of Act of 1848 - -	17
2. Provisions of the Act - - - - -	18
3. American Pharmaceutical Association -	19
4. Law in Operation - - - - -	20
V. Work of Pharmaceutical Association - - -	23
1. Committees - - - - -	23
2. Draft of Uniform Law - - - - -	25

Chapter III. Tea.	(Page)
I. History of Tea - - - - -	27
II. Tea Plant - - - - -	27
III. Adulteration of Tea - - - - -	28
IV. United States Imports of Tea - - - - -	30
V. Legislation on Tea - - - - -	30
1. Resolution - - - - -	30
2. Legislative History of Act of 1883 - - - - -	31
3. Provisions - - - - -	32
 Chapter IV. Animal Diseases and Meat Inspection.	
I. Diseases - - - - -	33
1. Trichina - - - - -	33
2. Texas Fever - - - - -	33
3. Foot and Mouth Disease - - - - -	34
4. Pleuro-Pneumonia - - - - -	35
5. Bovine Tuberculosis - - - - -	35
II. Early Legislation and Agitation - - - - -	36
1. Reasons - - - - -	36
2. Act of 1865 - - - - -	36
3. Act of 1866 - - - - -	37
4. Period of Agitation, 1878 - 1884 - - - - -	37
III. Legislation 1879-1884.	
1. Bills and Petitions - - - - -	40
2. Attempt to Establish the Bureau of Animal Industry - - - - -	40
3. Senate Resolution 1884 - - - - -	41
4. Legislative History of Act of 1884 - - - - -	41

	(Page)
5. Provisions of the Act - - - - -	45
IV. Later Legislation, 1884-1890 - - - - -	46
1. Reasons for Legislation - - - - -	46
2. Bill Passed by Senate - - - - -	46
3. House Bill in 1887 - Came to no Con- clusion - - - - -	46
4. Appropriation Rider, 1887 - - - - -	47
5. Senate Bill in 1888 - Came to no vote -	47
V. Meat Inspection - - - - -	48
1. Meat Inspection Bill Passed by Senate, 1887 - - - - -	49
2. Senate Resolution - - - - -	49
3. Meat Inspection Bill - Legislative History, 1890 - - - - -	50
4. Provisions of Act of 1890 - - - - -	52
5. Meat Inspection Act, 1891 - - - - -	53
6. Provisions of Act of 1891 - - - - -	54
VI. Results from Legislation - - - - -	55
Chapter V. Oleomargarine	
I. History of Oleomargarine - - - - -	57
II. Legislation - - - - -	58
1. Early Attempts - - - - -	58
2. Resolutions - - - - -	58
3. Legislation in 1886 - - - - -	59
a. Legislative History of Act - - - - -	59
b. Provisions of the Act - - - - -	63
III. Report on Oleomargarine - - - - -	64

Chapter VI. Lard	(Page)
I. Reasons for Legislation - - - - -	66
II. Legislation - - - - -	67
1. Bills and Petitions - - - - -	67
2. Legislative History of the Conger Bill - -	67
Chapter VII. Legislation for the District of Columbia.	
I. Special Legislation- - - - -	70
1. Animal Inspection - - - - -	70
2. Flour - - - - -	70
3. Oleomargarine - - - - -	71
4. Candy - - - - -	71
II. General Pure Food Legislation - - - - -	71
1. Legislative History of Act of 1888 - - - -	71
2. Provisions of the Act - - - - -	72
3. Attempts to Amend - - - - -	73

PART II.

Chapter VIII. General Pure Food Movement.	
I. General Pure Food Movement, 1879-1890 - - -	74
II. Resolutions, 1884, 1888 - - - - -	75
III. Legislation - - - - -	75
Chapter IX. Cheese.	
I. Filled Cheese - Need for Regulation - - - -	77
II. Legislation on Cheese - - - - -	78
1. Legislative History of Act of 1896 - - - -	78
2. Provisions of the Act - - - - -	81
3. Act in Operation - - - - -	81

	(Page)
III. Cornell <u>V.</u> Coyne - 1904 - - - - -	82
Chapter X. Tea.	
I. Reasons for Legislation - - - - -	83
II. Legislation - - - - -	83
Chapter XI. Oleomargarine.	
I. Reasons for Further Legislation - - - - -	85
II. Legislation, 1890-1906 - - - - -	86
1. Grout Bill - Passed by the House - - - -	86
2. Legislative History of Act of 1902 - - -	88
3. Provisions of the Act of 1902 - - - - -	92
III. Oleomargarine Cases in the United States	
and Federal Courts - - - - -	92
1. U.S. <u>V.</u> Eaton, 1892 - - - - -	92
2. U.S. <u>V.</u> Mass., 1894 - - - - -	93
3. <u>In re</u> Kollock Petitioner, 1897 - - - -	95
4. Schollenberger <u>V.</u> Penn., 1897 - - - - -	96
5. Wilkins <u>V.</u> U. S. - - - - -	97
6. U.S. <u>V.</u> Dougherty, 1900 - - - - -	97
7. Dougherty <u>V.</u> U. S., 1901 - - - - -	97
8. McCray <u>V.</u> U. S., 1904 - - - - -	98
Chapter XII. Meat.	
I. Animal Diseases - - - - -	100
1. Diseases - - - - -	100
2. American Animals and Meat in Europe - -	101
3. Legislation on Animal Diseases - - - - -	103
II. Work Done in Animal and Meat Inspection	
1896-1906 - - - - -	104
1. Meat Inspection - - - - -	107
III. Reports on the Chicago Meat Industry - -	108

	(Page)
1. Sinclair - - - - -	109
2. <u>Lancet</u> - - - - -	111
3. Jaques - - - - -	112
4. McKee - - - - -	113
5. Hedger - - - - -	114
6. Secretary of Agriculture - - - - -	114
7. President's Committee - - - - -	117
IV. Legislation for Inspection, 1890-1906 - - -	118
1. Bills and Appropriation Amendments - - - -	118
2. Agitation in 1906 - - - - -	119
a. Resolution and Bills - - - - -	119
b. Meat Inspection Rider on Agriculture Appropriation Bill - 1906 - - - -	120
3. Provisions of the Act - - - - -	122
Chapter XIII. Pure Food Legislation.	
I. Movement for Pure Food Legislation - - - - -	125
1. Adulteration - - - - -	126
2. Preservatives - - - - -	127
a. History of Preservatives - - - - -	127
b. Government Experiment - - - - -	130
c. Agitation for Legislation - - - - -	131
II. Pure Food Legislation - - - - -	132
1. Bills and Petitions - - - - -	132
2. Adulteration and Misbranding, 1891, Passed by the Senate - - - - -	132
3. Hansbrough Bill, 1902 - - - - -	134

	(Page)
4. Hepburn Bill, 1903 - - - - -	135
5. Branding and Labeling Act, 1902 - - - - -	138
a. Legislative History of the Act - - - - -	138
b. Provisions of the Act - - - - -	139
6. Hepburn Bill Passed by the House, 1904 - -	140
7. Pure Food Act of 1906 - - - - -	141
a. Legislative History of the Act - - - - -	141
b. Provisions of the Act - - - - -	148
Chapter XIV. Conclusion - - - - -	153
Footnotes - - - - -	157 - 181
Bibliography - - - - -	182-188

PART I.

PURE FOOD AND DRUG PROBLEM

I. European Background.

1. Introduction.

Food and drug regulation in the nineteenth century passed into the control of the Federal governments largely as a subject of social legislation. During the middle ages, the attempts to combat fraud and adulteration had been made by the guilds to keep up the standards for the reputation of their business, rather than to protect the public health. As the guild system declined and the different states were organized, this regulation was taken over by the central governments, but still considered from the standpoint of trade.

In the early nineteenth century, the attitude of statesmen toward the welfare of their constituents began to change and a new type of social legislation was the result. This change was due to the philosophical theory that all action should aim to bring the greatest good to the greatest number. A man must not conduct his business to the detriment of the public. The humanitarian movement meant new standards which revolutionized conditions for the masses. Although food adulteration was carried on for centuries, little was known of the method or extent of the practice, so the public remained indifferent.

The effective investigation and legislation on food and drugs in the nineteenth century was made possible by the comm

mon use of the microscope and of chemical analysis. In this early movement against adulteration, England is discussed first because of the contact from the beginning of the history of the United States, and the commercial relations.

2. Work of Accum and Hassall.

Accum, German chemist, in 1820, published a book, in London, entitled, "Adulteration of Food and Culinary Poisons." It was published also in America the same year and in Germany two years later. This book, with its death's head, cross bones and spider web, aroused England by the revelations of adulterated foods and drugs.¹ "It was difficult to mention a single article of food which was not to be met with in the adulterated state; and there are some substances which are scarcely ever to be procured genuine."² Some of these were harmless, but many were highly deleterious.

The workmen employed in the illicit pursuits were kept ignorant of the nature of the substances used and of the purpose for which the product was prepared. Adulteration could well be "distinguished as an art or mystery."³

Though the facts which Accum presented were startling, there was no movement for reform at that time. Many took the attitude that it was a matter of indifference what they ate or drank since disease and death was in the pot. His book did not touch the individuals of the craft, so they continued as before.⁴

Accum left England after being acquitted on a charge of

embezzlement and returned to Germany, though it was said that he was driven out of England. He had published in London three other works, "The Art of Making Wine" (1820), "On Brewing", and "The Art of Making Wholesome Bread" (1821), but they seem not to have received the comment given to his first work.⁵

Thirty years later, Wakley, the editor of the Lancet (London) started a campaign for pure food and drugs. He organized the "Lancet Analytical Sanitary Commission" under Arthur Hill Hassall. The results of the investigation were published by Hassall, in two editions entitled, "Adulterations Detected" (1861) and "Food, Its Adulteration and Methods for Detection" (1876), and are considered encyclopedias of dishonesty.⁶

Hassall and his assistants secured samples of foods and drugs from manufacturers and retailers. After examining and analyzing these, the sellers were notified and their names published in the Lancet's Commission's report. Two thousand names of merchants and tradesmen were published with the result "equal to firing into a rookery". Both the Commission and editor were threatened many times but the offenders feared the microscopes unerring test. Many retailers would rather have their own names published than to disclose those from whom they purchased.⁷

During the first four years (1851-54) the Commission made 2387 analyses; 2063 of foods and 324 of drugs. Hassall alone made 2222 of those. He said not a tenth of the adulter-

ation prevailed at the end of that period.⁸ But the work continued for twenty years and the agitation and legislation which resulted "earned for the Lancet the gratitude of the civilized world by its fearless, earnest, persistent advocacy of food adulteration laws."⁹

The reasons alleged for fraud and sophistication of foods and drugs were:

- (1) Obedience to the wishes and taste of the public.
- (2) That additions were often improvements.
- (3) That adulterants were necessary to preserve the strength of some articles, as sulphuric acid in vinegar.
- (4) That it was impossible to supply the genuine article at the price the public was willing to pay.
- (5) And after all it was claimed they did notharm.

Hassall held that the real reason was unfair competition and the desire for profit.

It became an economic problem for England. Buyers lost confidence in those with whom they dealt. "The foundation of trade, namely, the faith in commercial integrity" was undermined by it. The tendency to shift the blame to the public which liked bargains at any sacrifice, and to excuse the grocer because he must make a good profit, did not remedy the situation. A Parliamentary Commission was appointed in 1855 to investigate adulteration of food. It reported that the "public morality is tainted and the high commercial char-

acter of this country seriously lowered, both at home and in the eyes of foreign countries.*¹⁰ A law was passed in 1861 and amended in 1872, but proved ineffective, because it was not clear as to what constituted an adulterant, so it was replaced by the Food and Drug Act of 1875, which avoided the term *adulteration.*¹¹

3. Some Adulterations in England.

Some of the adulterants after 1820, as shown by Accum, Hassall, and others were as follows: in

Bread - Rice, beans, rye, Indian Corn, potato flour, and mixture of salt and alum called "hards" and "stuffs."¹²*

Milk - water (oftened poisoned from leaden pipes) and annatto.¹³

Butter - Lard, and water to extent of 20 and 30%.¹⁴

Sugar - Wheat flour, potato flour and tapioca starch.¹⁵

Ginger - Wheat, sago, potato flour, rice, mustard husks ground, colored with turmeric.¹⁶

Pepper - Oil seed cakes, clay, and Pepper dust (sweepings of pepper warehouse.)¹⁷

Tea - Foreign leaves, exhausted tea leaves redried, glazed and colored with Prussian Blue, Black lead, turmeric, Indigo.¹⁸

Coffee - Roasted wheat, rye, beans, carrots, acorns, peas, Mangel Wurtzel, oakbark, chicory and artificial berries. Chicory was mixed with seeds, ma-

hogany and saw dust, and colored with baked liver.¹⁹

Confectionaries - Wheat and potato flour, arrow root, hydrated sulphate of lime, and colored with Indigo, Prussian Blue, Antwerp Blue, cochineal, carbonate of copper, red lead, vermilion chrome yellow, Gamboge, sap green emerald green, etc.²⁰

Liquore - coculus indicus, quassi, coriander seed, capsicums, caraway seed, ginger, alum, sulphuric acid and water. (Crusting of the bottles, staining of the corks, and use of borrowed cobwebs aided the deception.)²¹

Quinine - Gum starch, chalk, sulphate of barytes, stearine, sulphate of lime, sulphate of magnesia, and sulphate of soda.²²

Iodine - Black lead, water, crude sulphate of antimony.²³

Arrow root - Potato flour.²⁴

Rhubarb - Wheat flour, gamboge, colored with turmeric.²⁵

Spirits of Nitre - Water and alcohol.²⁶

Peruvian bark was of poor quality and came packed in green hides, so was half decayed when it reached Spain to be sent over Europe.²⁷

Artificial coloring was done by the use of aniline dyes which gave the yellow color to macaroni, the red to catsup and sausages, etc. When the dyes were discovered by Perkins, in 1858, they were used to dye cloths, but soon used for food and drinks

as well.²⁸ Verdigris or acetate of copper gave the green color to gooseberries, green gage plums, rhubarb, olives, etc. But pickles were colored from standing twenty-four hours in a brass or copper kettle.²⁹

Meats, when canned or made into sausage, soups, polonies, or a'la mode beef, were often from diseased animals. Three insurance companies in London insured cattle against disease, and by the agreement the company got the dead animals. The owner received two-thirds of their value and one-third of the salvage. The companies sold the meats to firms for soups, pies, sausage, etc. One man on examination said he was certain if one hundred carcasses of cows were lying dead near London, he could sell all within twenty-four hours. "It doesn't matter what they died of." One shop used five hundred pounds a week, which was purchased at a penny a pound.³⁰

4. Legislation in Europe.

The English Pure Food and Drug Act of 1875 contained the following important provisions:

Food was any article used for food and drink, and drugs were medicines for internal and external use. It prohibited the mixing and selling of injurious ingredients, colors, stains, powders, etc., with food or drugs, or the sale of food or drugs not of the proper nature, substance, or quality.

and compounded articles were to be labeled as such.

Public analysts were to be appointed to analyze the samples procured by purchasers or officers, and to give a certificate of the analysis which was prima facie evidence for prosecution. The defendant was to be discharged if he could prove that he bought the article in the same quality as sold, and with a warranty, so if he believed the article pure he had only the costs to pay. Persons refusing to sell samples were liable to a penalty of ten pounds. It was also a crime to forge certificates, warranties, or labels. The act applied to Scotland and Ireland as well as England.³¹

On the continent, the conditions were much the same, but the movement for pure food began later than in England. France, in 1881, had established chemical laboratories in the cities where people could bring samples to be tested. The Paris laboratories alone, in 1885, tested 6000 samples and found 50% bad.³² The codes from 1851 - 1884 were related to poisonous substances and coloring in foods, beer, and toys.

Bismark urged food legislation for Germany in 1877, and a law was passed in 1879 which applied to food, toys, wall paper, colors, and eating and drinking utensils. It forbade certain methods of preserving and packing foods, which had an influence on the American meat trade with Germany. The selling of diseased animals for meat, of foods not of the proper nature, and of adulterants for foods was prohibited.³³ Prussia, in 1884, made regulations with reference to milk;

its refrigeration, analytical examination, and health of the persons in charge.³⁴

The countries having laws relating to adulteration, coloring, or markets were, Austria (1852, 1866, 1880), Hungary (1876), Belgium (1829), Norway (1842, 1874), Portugal (1886), Sweden (1874, 1876), and Italy (1874).³⁵

II. American Background.

1. Introduction.

Adulteration of foods and drugs in the United States was not a serious problem until the nineteenth century. The people lived a simple life and produced most of the articles they used. The tea, coffee, and spices which were used were subjects of adulteration abroad. This was also true of the drugs, though many of the so-called doctors devised their own remedies.

As the country developed, American foreign trade increased, competition became keener, and the quality of the food and drugs was lowered. The object of the manufacturer was to produce the article as cheaply as possible, which soon meant fraud and adulteration.

It has been said - "playing tricks upon our fellows is a necessary element of human life" and men cheat for the fun of the thing. The victim expects a certain amount of it and "charges it up to profit and loss."³⁶ If the average man in America, even in the first half of the nineteenth century, had realized how much he was charging up to loss, he would

have been urging food and drug legislation. But the public was ignorant and indifferent.

2. Some Adulterations in the United States.

Nothing was left unadulterated, not even the adulterants themselves. Some of these adulterants were as follows: in

Bread - Potato and rice flour and white sand, whitened with salt and alum.³⁷

Butter - Lard, cheap fats, and water, to the extent of 6 - 8%.³⁸

Lard - Cottonseed oil, flour, alum, potash, carbonate of soda, boiled starch, and water to the extent of 20%.³⁹

Tea - Foreign leaves, exhausted tea leaves, dyed and glazed. (Discussed in detail in later chapter).

Allspice - Bread crusts, beans, corn, woody tissue, sand, ground mustard seed, colored with turmeric.⁴⁰

Pepper - Corn meal, peas, beans, baked flour, rice, mustard seed, and pepper dust.⁴¹

Mustard - Oat and wheat flours, gypsum, radish seed, woody tissues, colored with coal tar, turmeric, or Martin's color (explosive and poisonous.)⁴²

Catsup - Skins and cores of tomatoes or fruit, salicylic acid, and colored with coal tar.⁴³

Marmalade - Turnips, parsnips, apples, carrots, flavored and dyed.⁴⁴

Olive Oil - Cottonseed oil, oil of sesame, walnut or

sunflower seed, peanut and even lard.⁴⁵

Milk - Chalk, gum, dextrine, soda, hemp seed, boiled starch, sugar, and once boiled brains, colored with annato.⁴⁶

Honey - Glucose to the extent of 57%.⁴⁷

Cheese - Boiled potatoes, beans, lard, colored with annatto.⁴⁸

Wines and brandies - Mixed with inferior grades, adulterated and dyed as they were in England.

Sugar - Glucose.

The glucose was made of boiled corn starch, and saw dust in dilute sulphuric acid.⁴⁹ Lead, Muriate of tin, calcium, iron, and magnesia were found in most glucose. A New York man refused to rent his building for making glucose, because the sulphuric acid was destructive to the building and machinery, and the man, wishing to retain it, acknowledged the sulphuric acid and sulphate of lime were injurious to health and said he never used any sugar but the best. Manufacturers denied admittance to their factories because the work was carried on with "as much secrecy as the illicit distillation of spirits." The editor of the Chicago Grocer said seven-eighths of the sugar and syrup were adulterated with glucose and the American honey was so largely glucose that a Glasgow grocer was fined for selling it.⁵⁰

The extent of adulteration is further shown by the re-

port of the Commissioner of Internal Revenue in 1889, which listed the following adulterated articles: ten brands of canned vegetables, sixteen of lard, seventeen of black pepper, twenty-two of olive oil, twenty-two of coffee, thirty-two of mustard, and sixty of baking powder.⁵¹

3. Legislation to 1890.

By 1888, all but three states had passed some laws relating to food adulteration, and by 1890 the Federal government had legislated on drugs, tea, oleomargarine, meat, and the movement for a general pure food law had begun. Congress had legislated on these subjects through its power to regulate foreign and interstate commerce tax.

The states which enacted laws on food before 1888 were:

Alabama	1887	Kansas	1885, 1887
Arizona	1883	Louisiana	1880, 1882, 1886
California	1870, 1881, 1883	Maine	1885
Colorado	1881, 1885	Maryland	1878, 1883 1886
Connecticut	1879, 1887	Massachusetts	1882
Dakota	1885, 1865	Michigan	1885
Delaware	1879, 1883	Minnesota	1879, 1881
Florida	1881	Montana	1887
Georgia	1882	New Hampshire	1881
Idaho	1887	New Jersey	1881, 1887
Illinois	1885	New Mexico	1884
Indiana	1883	New York	1864, 1888
Iowa	1886, 1888		

Ohio	1885	Vermont	1855, 1870
Oregon	1885	Virginia	1875
Pennsylvania	1883	West Virginia	1885
Rhode Island	1882	Wisconsin	1878
South Carolina	1885	Wyoming	1886
Tennessee	1814		52
Utah	1876		

CHAPTER II

DRUGS

I. Pharmacy in the United States.

The history of drug adulteration and legislation in the United States is closely connected with the history of pharmacy. The medical and pharmacy practice was vested in one profession for a long period. There was little training required; the apprentice studied a few books and gathered roots and bark. At the time of the American Revolution, there were no American degrees and hardly four hundred European degrees, but there were 3500 special practitioners.

Dr. John Morgan of Philadelphia, in 1765, said the medical men should prescribe medicine but leave "to the apothecary the preparing and compounding of medicines." In 1819, the University of Pennsylvania decided that there should be a Professor of Materia Medica and Pharmacy and it should be his duty to teach the Pharmaceutical arts. Two years later, the trustees of the University made the requirements for the degree of Master of Pharmacy to be three years apprenticeship with a respectable apothecary, an examination before the department, and two courses of lectures in Chemistry. Sixteen candidates received the degree that year.¹

Boston and New York started schools of Pharmacy in 1823 and 1829

II. Pharmacopoeia.

The three schools of Pharmacy, Philadelphia, Boston and New York, attempted to make a Pharmacopoeia but without re-

sults except for local use. To Dr. Lyman Spalding, of Cornish, New Hampshire, is due the credit for starting the movement for the United States Pharmacopoeia. His plan was to have a draft made by the medical societies and colleges in each of the four divisions of the country, and these drafts were to be submitted to a National Convention in Washington. As there were but two presented, by Boston and Philadelphia, they were the ones revised and consolidated into the United States Pharmacopoeia which was published in Boston, December 15, 1820.

The Pharmacopoeia is revised every ten years by a special committee.²

III. Problem of Adulteration in Drugs.

The United States was the "dumping-ground" for the inferior, mixed, and adulterated drugs of Europe. An English agent said they made chemicals, extracts, and other medical preparations in different qualities for different American markets. The better grades were for Atlantic Cities, and the inferior for Western states at about half the price.³ The English manufacturer was held down to a low price, so devised every method to fill the order and please the customer, who sold the article as he purchased it and "shook off the responsibility." Certain parties prepared adulterants at two and four cents a pound and agreed to match in color any powder submitted.⁴

Some of the adulterants used were as follows: in

Blue Pill - Blue Clay, Prussian Blue, saccharine, and $7\frac{1}{2}$ to 10% mercury.⁵

Rhubarb - Powdered and colored with turmeric.⁶

Sulphur - from 80 to 90% sulphate of lime.⁷

Opium - Spanish liquorice paste, bitter extract, and no morphia.⁸

Sulphate of Quinine - Salts of Willow Bark, chalk, plaster of Paris, and often fine cotton to fill half of the bottle.⁹

Calomel - white argillaceous earth.¹⁰

Cream of Tartar - Tartrate of lime, chalk, marble powder, sulphate of lime, sand, nitrate of potassia, alum, starch, arrow root, sulphate of soda, and sometimes lead and arsenic.¹¹

White Ginger - Bleached with sulphuric acid, chloriated lime, and coated with powder of oxalate of calcium.¹²

Oregon balsam fir.- Two parts rosin to one part of turpentine, and one ounce of oil of wormwood to five gallons of the mixture.¹³

Chloroform - alcohol, water, and glycerine.¹⁴

"Italian" lemon and Bergamont were made by western druggists and closed with false seals.¹⁵ East India Rhubarb, worth ninety cents a pound, when ground, was sold for "True Turkey" at four and a half dollars a pound.¹⁶ The labels and wrappers used on English Calomel were imitated and used in

the western states.¹⁷

IV. Legislation on Drugs.

The Federal legislation to prevent the importation of adulterated and inferior drugs was an exercise of its power to regulate foreign commerce.

1. The Legislative History of the Act of 1848.

The agitation for this legislation became effective in 1848. Eleven petitions were presented to Congress on the subject of adulteration of drugs on April 3 of that year.

Dix (New York) introduced a bill into the Senate, April 7, 1848, from the Committee on Commerce "to prevent the importation of adulterated and spurious drugs and medicines," which was read twice in the Senate. Edwards (Ohio) on June 2, presented a similar bill in the House from the select committee. He emphasized the importance of the bill and the need for immediate legislation. "Twenty-four thousand pounds of adulterated Peruvian bark alone had just been exported" and must be stopped on its arrival in the United States ports. Hunt (New York) said that deleterious drugs had been very injurious to the army in the Mexican war. The report of the select committee, composed of medical men, was enough to convince one that the bill should be passed.

The Edward's bill was passed by the House, June 2, and was reported in the Senate by Dix on June 20 for immediate consideration. Dix made a motion to strike out the provisions of the House bill and substitute the Senate bill, but

the motion was lost.

There was little discussion in the Senate. Dickinson (New York) had no faith in the legislation, but would not oppose it. If they could "prevent compounding of drugs, patients from taking and doctors from prescribing them," he would favor it. Davis (Mississippi) had talked with New York medical men and saw from their reports that the legislation was needed. Dix reported that the opinion of a national convention on the subject favored the bill if it was not too much restricted in its provisions.

The bill was passed by the Senate with the title amended to read "An act to prevent the importation of adulterated and spurious drugs and medicines", and the provision for inspection at each of the six leading ports. The House concurred and the president approved the bill June 26, 1848.¹⁸

2. The Provisions of the Act of 1848.

The medical preparations were to have the name and place of manufacture on each parcel, and to be appraised as to quality, purity and fitness for medical purposes.

If inferior in strength and purity to the standards of the United States, Edinburg, London, France, or German Pharmacopoeia and dispensatories, and unsafe or dangerous for medicine, a return to that effect should be made upon the invoice. The owner could call for a reexamination, but if the first examination was found correct, he had to give bond

and remove the drugs within six months or they would be destroyed. The Secretary of the Treasury was to appoint the special examiners of drugs and medicines.

3. American Pharmaceutical Association.

The law of 1848 seemed to lack adequate standards for the use of customs officials, so the New York College of Pharmacy called a convention of the Colleges of Pharmacy in 1851, which decided the law made provisions so there was no need to petition Congress for changes. The result of the meeting was so satisfactory that it led to a convention in Philadelphia for organizing the American Pharmaceutical Association in 1852. "The primary object of the convention was consideration of the best method of preventing importation and sale of adulterated and damaged drugs."²⁰

The report of the Philadelphia convention emphasized the inspection of drugs as a subject of deep interest to pharmacists, who felt the need of able drug inspectors. It was also the aim of the association to urge state and municipal inspection of drugs.²¹

The first article of the constitution for the association was "To improve and regulate the drug market by preventing importation of inferior, adulterated, or deteriorated drugs, and by detecting and exposing home adulteration."²²

The code of ethics further emphasized the aim, (1) "To uphold the use of the Pharmacopoeia in practice . . . , discountenance quackery and dishonorable competition in busi-

ness. (2) That all dishonest vending of inferior, deteriorated, and adulterated drugs should be exposed for the benefit of the profession," and (3) that they should seek . . . to furnish pure medicine because the doctors had given the dispensing of medicines over to the apothecaries.²³

4. The Law in Operation.

Although there were charges of political favoritism and inefficiency against the inspectors, the report showed the law was effective. Edwards, who visited the ports and made the report to the Secretary of the Treasury, said the law was a benefit to the people and to the government for revenue.²⁴ It met with opposition at first from the commission houses and New York Commercial Journals;²⁵ but letters from six hundred doctors commended the action of Congress.²⁶

Drugs rejected, as reported by Edwards, at New York were as follows: -

July 19 - 1849 -	6650 pounds of rhubarb root from Canton
July 21 - 1849 -	981 pounds of opium from Marsailles
Aug. 10 - 1849 -	730 pounds of opium from Marsailles
Aug. 11 - 1849 -	2940 pounds of Jalap root from Tampico
Aug. 31 - 1849 -	2249 pounds of rhubarb from London
Sept. 1 - 1849 -	645 pounds of rhubarb from London
Sept. 5 - 1849 -	1415 pounds of gum gamboge from London
Sept. 8 - 1849 -	545 pounds of rhubarb root from Hamberg
Sept. 9 - 1849 -	1400 pounds of Senna from Leghorn

Sarsaparilla	65374 lbs.	Magnesia	4427 lbs.
Mezereon bark	1353 "	Aethea root	1117 "
Opium	3164 "	Liquorice root	9430 "
Kino	230 "	Bistort root	140 "
Scammony	1483 "	Gentian root	7572 "
Aloes	12373 "	Gentian powder	430 "
Squilla	1626 "	Lavender flowers,	3042 "
Peruvian bark	304135 "	Poppy flowers	190 "
Spanish Saffron	360 "	Hellebon root	460 "
Ergot	475 "	Pereria Blanco Root	730 "
Camomile flowers	1896 "	Cantharides	1276 "
Aesofaetida	3700 "	Creosote	140 ozs.
Worm seed	230 "	Bromide	430 "
Calchicum seed	2246 "	Sulphate of Quinine	3200 "
		Iodine	6862 "
		Hydriodate of Po-	
		tassium	3720 " 28

Amount rejected at Boston and Charleston,

August 1848 to January 1852.

Opium	5977 lbs.	Gum gamboge	189 lbs.
Scammony	1755 "	Peruvian Bark	1200 "
Valerian Root	1839 "	Egyptian opium	419 "
Senna	1171 "		29

The law was effective as seen by the decline in the amounts rejected. As an example, 3347 pounds of opium were rejected in the first nine months at New York by Bailey, the

examiner there, and only 3164 pounds in the last two and a half years. In the last thirteen months, he rejected 952 pounds and passed 70,000.³⁰ The total amount rejected by him was 710,000 pounds.³¹

Some drugs were imported of a superior quality to those of the same variety before the passage of the act, and "at a cost of 100% over the former price." East India rhubarb imported at thirty-five cents a pound sold readily and supplied the place of the worthless article formerly sold at five and ten cents a pound.³²

The results infer, (1) better grades of drugs were imported, (2) entire prevention of adulterated and inferior drugs from entry and use, (3) no embarrassment to the honest importer and dealer, (4) an increase in revenue, and (5) protection to the medical profession.³³

The pharmacists felt a "new order of things must be near" after the drug act had been passed so easily,³⁴ but they believed that the general government had done all in its power, and that adulteration of drugs in the United States must be dealt with by the States.³⁵ The English pharmacists admitted that "good enough for America" would have a new significance in the drug market thereafter.³⁶

V. American Pharmaceutical Association on Drug Legislation.

1. Committees.

The American Pharmaceutical Association as a factor in the further agitation was represented in its standing and

special committees on various subjects, as the Committee on Adulterations, 1852-61, 1871-6, 1901; Committee on Drug Market, 1862; Committee on Legislation Legislation, 1859, 1871; and the Committee on National Legislation, 1895. Some of the leading chairmen of these committees were Joseph Remington, J. M. Maisch, F. E. Stewart, E. R. Squibb, and C. E. Guthrie.

C. T. P. Fennel stated in a paper read before the Association in 1895, that the American Pharmaceutical Association must recognize that the original purpose of the organization, "to improve and regulate the drug market," must be abandoned. The problem had passed beyond her control. The organization must limit itself to "authorizing eliminations, modifications and additions to the Pharmacopoeia. . . .".³⁷

While it is beyond the scope of this study to give a complete account of state pharmacy and drug legislation, a fairly satisfactory summary can be compiled from the reports of the Committee on Legislation of the American Pharmaceutical Association. Some state laws covered registry and regulation of the pharmacy profession only, and others prohibited adulteration of drugs. The clear intention of such legislation in both cases is the same, and throughout the agitation for such legislation on the subject, the influence of the English legislation is apparent. Some of the laws were modelled directly after the English precedents. New York, New Hampshire, Massachusetts, Pennsylvania, New Jersey, Ohio, Michigan and Illinois made laws in 1871, Missouri 1874,

and Kentucky in 1874.

2. Drafts of Uniform Model Law.

During the movement for state legislation on drugs, the Pharmaceutical Association felt the responsibility of its organization that it "should anticipate all legislative action by taking initiatory steps in this much needed reform", and in 1868 drafted a proposed law which might be used by the states as they were finding it difficult to draft a satisfactory law.

This draft provided for registering of pharmacists, requirements for graduates, and the appointment of a State Pharmacy Board which would examine all candidates and prosecute violators. On the question of adulteration, it provided that "all persons knowingly, intentionally and fraudulently adulterate or cause to be mixed any foreign or inert substance with any drug or medical substance . . . with the effect of weakening or destroying its medical power, or who shall sell otherwise than in the unbroken original package put up by the manufacturer . . . shall be guilty of a misdemeanor and, on conviction thereof before the criminal court, shall forfeit all articles so adulterated, and shall pay a penalty . . . *.38

E. R. Squibb drafted a model law, 1879, based on the English law. It provided for defining "food" as articles of food and drink for man and animals, and "medicines" as articles of relief. The United States Pharmacopoeia was to be

the standard for medicines. Offenses defined were the addition of substitutes to increase weight or quantity, or substituting one article for another. No compounds were to be used. Penalties were to be \$200 fine for the first offense and six months imprisonment for the second.

A State Board of Health was to be appointed by the governor from a list of men nominated by the Medical and the Bar Associations, and the Columbia faculty of Chemistry and Physics. The Board of Health was to appoint the Board of Inspectors of Food and Medicine to make the examinations.³⁹

By 1881 the movement against drug adulteration had broadened to include general legislation to prohibit adulteration of foods and drugs in New York, New Jersey and Michigan.

TEA

I. History of Tea.

The home of the tea plant is Asia. Most authorities agree that it was a native of China, though it was found in a wild state in Assam, India. The first mention of it was in Sao-Pao in 2700 B.C., and it was used as a beverage in the Fifth Century B.C.¹ However, it was not until 600 A.D. that it came into general use in China. From there it was introduced into Japan in 810, and into Europe about 1650.² Through the English East India Company, tea became an important article of trade and its purity was not questioned.³ Tea found its way to America through the English trade and finally became an important factor in the early history.

II. Tea Plant.

The tea plant, Thea Sinensis, is a leafy shrub growing to the height of three to six feet. It is planted in rows three or four feet apart, and requires from three to four years to reach maturity. From that time, there are three and four crops a year until the tea plant is about twelve years old, when it must be replaced by seedlings.

The grades of tea depend upon the time of gathering the crop, and the age of the leaves. The first gathering is the best. It consists of young leaf buds gathered in the early spring. The poorest in flavor is the August crop. The leaves are large and old. The other crops are gathered

in May and June.

Most writers agree that there is only one species of tea plant and the T. Bohea and T. Virides are varieties. The difference in soil climate and method of preparation produces the different teas. The black tea is made from plants grown on hill slopes. It is roasted first in iron vessels, and then in sieves over charcoal fire. The dark color is due to a fermentation of the leaves before drying. Green tea is grown on fertilized soil, roasted but once - in the shallow iron vessel, and dried in a fresh state.⁴ Before the 17 century there were many substitutes for tea, both in America and Europe. Among these were willow, strawberry and holly leaves.³

III. Adulteration of tea.

Tea adulteration began in China - with tea for foreign trade. The Chinese, themselves, did not use the dyed, mixed teas which they sent to Europe. The four ways by which tea was adulterated were (1) facing, (2) mixing or blending, (3) substituting spent or partially used leaves, and (4) sanding.⁶ Facing is the process of coloring tea to improve the appearance. This was most common in Japan and China. Japan kept it a secret as to what she used⁷, but in China the process might be seen any time.⁸ Robert Fortune, in "Tea Districts of China and India", explained the process as he saw it carried on. Prussian Blue and burnt gypsum were crushed and powdered - mixed in a porcelain bowl in the proportion of four parts of gypsum to three of Prussian Blue. This mixture

was applied while the tea was roasting - about five minutes before it was removed from the fire. The workman turned the leaves rapidly to mix the color well. His hands were colored from the Prussian Blue. The Chinese said the tea was better without the coloring, but England liked the uniform color and the materials were cheap. So the blooming green teas of Canton were dyed "to suit the taste of foreign barbarians." Fortune estimated the amount of powder to tea to be about one ounce to fourteen and a half pounds.⁹

Mixing or blending with spurious or foreign leaves added to bulk and weight so was a source of profit to the adulterator. The British Consul at Shanghai wrote (1871) that 5300 pounds of willow leaves were at one port to be used in adulterating tea for export, at a ratio of ten to twenty per cent. There was no attempt to make a secret of this fraud.¹⁰ The English were guilty also of this and used various leaves, as sloe and hawthorne.

The substituting of spent leaves became common in England. There were manufacturers who bought the exhausted tea leaves from hotels, clubs, coffeehouses, at two and three pence a pound, redried and colored them for market again. In 1843 there were eight manufacturers carrying on this adulteration process in London.¹¹ These leaves were used chiefly in adulterating black tea. After they were dried, gypsum and japonica were added. They were then glazed or faced with graphite or silica preparation for appearance and treated with a decoction from logwood to give a tea like color to the liquid when infused.¹²

China called this "Lie Tea" and made much of it to be used as an adulterant. To this were added materials for weight, as iron and steel filings and sand to the extent of forty-five percent. This was called the sanding method of adulteration.¹³ The scenting of tea was done by sprinkling over it powdered flowers such as Jasemine, Sambac, Olea fragrans, gardenia Florida.¹⁴

Of fifty samples of tea examined by Hassall, none were found genuine. He found Prussian Blue, turmeric, French chalk, black lead, indigo and China Clay. The only safe teas to use were the cheap ones.

All that is said of adulteration of tea in China and England is true of the tea which the Americans purchased and used. The American consul said that China tea growers and merchants would never improve their methods of handling tea until forced to thru foreign commerce.¹⁵

IV. The United States imports of Tea were

1790	-	3,022,983	pounds per year		
1800	-	5,119,341	"	"	"
1810	-	7,708,208	"	"	"
1820	-	---			
1830	-	8,609,415	"	"	"
1840	-	20,006,595	"	"	"
1850	-	29,872,654	"	"	"
1860	-	31,696,657	"	"	"
1870	-	47,408,481	"	"	"
1880	-	72,162,936	"	"	"
1890	-	84,627,870	"	"	" 16

V. Legislation on Tea.

1. Resolution - 1860.

A resolution was introduced into the House of Representatives, in 1860, to inquire into the tea question, as it

was reported that China was exporting to the United States tea substances "some of which are of a deadly nature and others calculated to bring on most fearful disorders in the human frame," but nothing was done with the resolution.¹⁷

2. Legislative History of the Tea Act.

Twenty-two years later, 1832, Hardenbergh (New Jersey) introduced a bill in the House "to prevent importation of adulterated teas". This was referred to the Ways and Means Committee, which reported a substitute, February 3, 1833. The substitute was referred to the whole House and ordered printed. The same bill was introduced into the Senate, January 6.

On February 24, Randall (Pennsylvania) called for the substitute and the report was read also. It gave the English law on adulterated tea. Randall said he had one or two amendments to add to meet the objections of some New York firms. Beach (New York) objected to the passing of the bill because it was "hasty legislation". England had had a commission working two sessions before a bill was introduced, while here in Congress they had "hatched up a bill" in a few days and asked unanimous consent for it. Congress had tried to legislate to prevent adulteration of food and drugs from 1877-1881 but they "made little progress on account of doubt that exists as to the Constitutional right of Congress to interfere with state matters".

The question was asked, why not make it include spices and other articles so there would be less special

legislation. Hardenbergh said it was too late in the session to extend the provisions to so many articles, but the "tea law would be one step."

The bill was passed by the House with the amendment, that the act be enforced by the Secretary of the Treasury. Two days later, February 26, the bill was passed by the Senate without debate, and was approved by the President, February 28, 1883.¹⁸

3. Provisions of the Act.

The act of 1883 prohibited the importation of adulterated and spurious teas. The importer was required to give bond at the port of entry for the tea and to send samples to be examined within three days. Notice was to be given if the tea was adulterated, and the importer was required to take it out of the United States within six months. He had a right to call for a second examination, which was to be made by three experts -- one chosen by himself, one by the examiner and the third by these two. Their decision was final. Exhausted tea was defined as "tea deprived of proper quality, strength by virtue of steeping, infusion, decoction, or by other means." The Secretary of the Treasury was to enforce the act.¹⁹

ANIMAL DISEASES AND MEAT INSPECTION

I. Animal Diseases.

1. Trichina.

The animal diseases and parasites, which became a menace to the animal and meat industry of the United States from 1860-90, were trichina, Texas fever, pleuro pneumonia, foot and mouth disease, and bovine tuberculosis.

Of these the trichina, discovered in 1835 by Sir James Paget, was the one common to hogs and to rats. The hogs got the parasite from eating the waste around slaughter houses. The female trichina, in her life of a month or less, produced 10,000 to 15,000 embryos, which penetrated the walls of the intestines and the muscles. They died in the muscles after about ten years if not eaten by some other animal. But if eaten, they were freed and developed within a week to maturity.¹

The trichina was killed either by cold or by cooking. In cold storage, the parasite died within two or three weeks after the host. By cooking at a temperature of 70° C., the trichina was destroyed. Examination has shown that it was not killed by burying the condemned meat.²

Trichinosis, the disease caused by trichina, was due to eating the meat raw or only partly cooked. The disease has never been serious in the United States.

2. Texas fever.

Texas fever was carried by a tick. Northern cattle were susceptible but southern cattle not. Until the 80's it was often considered a contagious disease and the cause unknown. Most attempts at legislating to control it were based on this hypothesis.

Attempts made to close the trails were opposed by southern cattle men who considered the charges were only a device to stop competition. Investigation proved the border line was from Virginia to San Francisco, so this became the quarantine line from February 15 to November 15, unless for immediate slaughter. This situation made it possible for cattle buyers to take advantage of southern cattle shippers. But Texas representatives in Congress opposed any measure which treated Texas fever as a disease, and an amendment was often suggested to that effect.³

The parasite was studied by Dr. Cooper Curtice, of the Bureau of Animal Industry in 1889.⁴ The methods for eradicating were (1) freeing the pastures from ticks - excluding the animals from the pastures until the ticks died of starvation - and (2) treating the cattle with preparations or rotating them on tick-free pastures.⁵

3. Foot and Mouth Disease.

Foot and Mouth Disease is primarily a disease of animals but is transmissible to man thru eating or drinking raw milk

or milk products from a diseased animal.⁶

It first appeared in the United States in 1870. Tho a very contagious disease, only 2 or 3% of the cases proved fatal unless in malignant cases. So the loss in the value of the herd came as a depreciation of the cattle affected, which made it a dreadful disease.⁷

4. Pleuro Pneumonia.

Pleuro pneumonia is a disease common only to animals of the bovine type. This disease spread over Europe before 1850, but had appeared in Brooklyn, New York in 1893. Massachusetts lost \$250,000 in herds and spent \$7,000 fighting the disease in 1859, but eradicated it by 1866.⁸

The symptoms of the disease (cough and fever) generally appeared within three or six weeks after the animal had been exposed.⁹ In many cases the lungs healed for a short time only. About 40 percent of the exposed animals contracted the disease, and from 10 to 50 percent of the cases proved fatal.¹⁰ Pleuropneumonia was the most dreaded animal disease in the United States, and after 1875 became a problem for stock raisers and buyers. It was the disease most prominent in the law for establishing the Bureau of Animal Industry, and was also the one most often referred to in the debates in Congress.

5. Bovine Tuberculosis.

Bovine tuberculosis is the disease most dangerous to

man. A cow may give the disease to man or other animals and still appear to be in perfect physical condition. The flesh of the tubercular animal had been considered safe for food in the early stages, but in advanced stages both meat and milk were dangerous. But in 1906, the Department of Agriculture reported that the tubercular cow's milk was "heavily charged with tubercle bacilli", so that one cow could infect the whole herd.¹¹ The tubercle bacillus lodge in the tissues and multiply until tubercles of great size may develop. Pneumonia may result if the bacilli attack the throat and cause its enlargement. It was not until the 90's that tuberculosis was considered to be so dangerous to the animal and meat industry.

II. Early Legislation.

1. Reasons.

The diseases among cattle in Europe were cause for alarm in America in 1863 and 66. The United States was warned thru her consuls of the danger. England and Germany were taking action to prevent the spread of the plague. The Commissioner of Agriculture reported conditions to the Senate which made it evident that action should be taken at once.¹²

2. Act of 1865.

A bill was hurried thru Congress December 12-13, 1865

without debate or amendment, to prohibit the importation of cattle. The Secretary of the Treasury was to make rules and regulations and send copies to officials in foreign countries. When the danger was over, the President was authorized to suspend the act on thirty days notice.

Senator Pomeroy (Kansas) was the only member who opposed the act. He felt it was not fair to the cattle importers who had given orders for cattle. But the general opinion was that the law must go into effect at once to prevent the importation of any cattle which might be diseased. The question of the reciprocity treaty with Canada did not interfere. Sherman (Ohio) explained that it merely provided that certain things from Canada enter free, on which other countries pay duty.¹³ The bill was approved December 19, 1865.

3. Act of 1866.

Within two months, it was seen that further legislation was needed to aid the Secretary of the Treasury, and a bill was passed and approved March 2, 1866, to prevent the importation of meat, cattle and hides.¹⁴

4. Period of Agitation, 1878 - 1884.

The next period of agitation began in 1878 and increased until 1884, when the Bureau of Animal Industry was created to handle the problem.

During the period, there was a two-fold problem to be met; first, the protection of foreign trade in live stock and

meats, second, the prevention of the spread of contagious animal diseases within the United States. Toward the end of the seventies, discrimination against cattle and meat products appeared. Great Britain, by order of the Privy Council February 10, 1879, required that live cattle entering the ports be slaughtered immediately,¹⁵ and health authorities on the continent condemned some American meats on account of uses of dangerous chemicals in curing processes and on account of disease, especially trichinosis. Germany and France both imposed a prohibition on American pork in 1881. As these countries were among the most important markets and live stock and meat were among America's leading exports, these restrictions were severely felt in the live stock and meat industry; so the government was called upon to devise remedies. It was charged that these foreign discriminations were using public health merely as an excuse, and that the reason was purely protection of their own industry.¹⁶ The Bureau of Animal Industry later insisted that from 1876 to 1881, France received 2,000,000,000 pounds of American pork and did not have a single case of trichinosis therefrom.¹⁷ In Germany, it was somewhat different for in some states the people were accustomed to eating pork raw. "Of 6329 cases (of trichinosis) in Germany during the years 1881-1898, 5456 occurred in states where raw pork was the common article of food."¹⁸ It was found on investigation that German hogs

were affected as well as American. These discriminations aroused the national pride of Americans, who had insisted that there was no foundation to the charges against American pork, but statistics do not support them, as shown by the following: in 1866, 2% of the hogs slaughtered had trichinae; in 1878, 8% of 100 slaughtered in Chicago; 1878-81, 4% of 8,773 slaughtered in Boston; 1881, 4% of 5400 slaughtered in New Orleans; and in 1883, 2.4% of 3331 examined by the Agriculture Department at Chicago. Of 18,889 examined in the United States, 2.7% had trichinae.¹⁹

III. Legislation, 1879-84.

The movement from 1879-84 was primarily to prevent the spread of the diseases. President Hayes had called attention to the pleuro-pneumonia which was in a mild form but dangerous to the foreign trade and a loss to the farmers.²⁰ The leaders in the movement in Congress were Hatch (Missouri), Plumb (Kansas), Paddock (Nebraska) and Palmer (Michigan), men who represented the agricultural interests of the country.

Cattle and cattle products were more valuable to the United States than the products of any other industry. "The cattle of the country", said Plumb, "form an important part of the food supply of the country, as well as a considerable portion of the wealth. So the value of the cattle and the necessity for wholesome food required every precaution to be taken to prevent and eradicate cattle diseases."²¹

Congressmen acknowledged that the agricultural sections seldom asked for legislation, yet they were slow to comply when the call was made.

1. Bills and Petitions.

Many bills were introduced into Congress for suppressing the diseases and for establishing a Bureau of Animal Industry. From 1879-84, inclusive, there were twenty-two bills presented; more than half from states west of Ohio. Petitions were presented from various agricultural organizations, Stock Yards, Boards of Trade, Chambers of Commerce, and Citizens and firms of different states. President Arthur referred in his annual message to a Convention of Cattlemen held in Chicago to discuss pleuro-pneumonia, and to send a committee to Congress urging cooperation in preventing the spread of the disease.²²

2. Attempts to Establish the Bureau of Animal Industry, 1881.

An attempt was made in 1881 to establish a Bureau of Animal Industry. Four bills were introduced and a substitute was reported which was passed by the House, May 10, 1882, 183 - 7, 101 not voting. The bill provided for a Bureau of Animal Industry which was to collect statistics on animal diseases and to aid in their eradication. At Plumb's request, this bill and a similar Senate bill were passed over in favor of one on the calendar providing for a Department of Agriculture. However, this question received no further

consideration.²³

3. Senate Resolution, 1884.

A Senate resolution was introduced by Anthony (Rhode Island) January 9, 1884, instructing "the Committee on Foreign Relations to inquire into the expediency of such legislation as shall enable the President to protect the interests against governments which have prohibited the importation of healthful meats from the United States." It was held that retaliation was the only remedy for regaining European markets. Logan (Illinois) and Vest (Missouri) urged legislation for meat inspection first. The resolution was amended to inquire into the discriminations and report legislation necessary "to place the United States on an equal footing with the most favored nations" but the amended resolution came to no vote.²⁴

4. Act of 1884 - Legislative History.

Hatch (Missouri), on December 11, 1883, introduced a House bill "to establish a Bureau of Animal Industry, to prevent exportation of diseased cattle and spread of infectious or contagious diseases among domestic animals." A substitute and report were reported and recommitted to the Committee on Agriculture January 26, 1889.

The discussion in the House opened with a report on the conditions due to pleuro-pneumonia, the spread of the disease, loss of foreign trade, and inability of the states to meet the situation were especially emphasized.

In the House the arguments in opposition to the bill were:-

(a) That it was unnecessary as the disease was exaggerated.²⁵

(b) That it gave foreign powers an excuse to prohibit American meat and animals.²⁶

(c) That it should be confined to pleuropneumonia.²⁷

(d) That it was unconstitutional because Congress had no power to send inspectors into states to get information, and it took property without due process of law.²⁸

(e) That it gave legislative and executive power to the Commissioner of Agriculture.²⁹

(f) That it was police regulation.³⁰

The arguments in support of the bill were:-

(a) That it would insure pure meat and healthy animals for foreign markets.³¹

(b) That it would prevent the disease at less expense than by state legislation alone, because millions had been spent by England, Holland and Australia.³²

(c) That it was needed to aid the states which were powerless alone.³³

(d) That it benefited the whole people, so states rights should not interfere.³⁴

(e) That it would prevent the spread of disease, which had not yet gone west of the Alleghanies.³⁵

Anderson (Kansas) expressed it as "Texas cattle interests and the Doctrine of states rights opposing the broad view of

the people." In closing the debate, Hatch explained the different points in the bill as he had done during the discussion. Wilson (Iowa) had brought out in the debate that it was almost impossible to get the attention of the Federal Congress for anything on the industries of the country outside the usual appropriation bills.³⁶

The motion to strike out the enacting clause lost by a vote of the chairman. A substitute was proposed by Talbott (Maryland) but was rejected. An amendment was adopted, authorizing the President to quarantine any part of a state when the commissioner reported that the state had failed to provide for suppressing a disease. A motion to recommit the bill lost, 138-145, and the bill was passed by the House on February 28, 155-127, 33 not voting.

In the Senate, a bill had been introduced, January 16, by Miller (New York), reported with amendments by the Committee on Agriculture, but not considered. On motion of Plumb (Kansas) on April 23, the House bill was taken up instead of the Senate bill.

The arguments in opposition to the bill were:-

(a) That it was unnecessary as the disease was exaggerated and European discriminations were unfair.³⁷

(b) That it put a stigma on United States cattle and hogs and the Agriculture Department published it to the world.³⁸

(c) That it set aside state authority and gave the Commissioner of Agriculture a veto and legislative power over the states.³⁹

(d) That it violated the constitution.⁴⁰

(e) That it was a bad precedent.⁴¹

(f) That it illustrated socialism, and only ruin could result from such legislation.⁴²

(g) That it would be extra expense and the Bureau of Animal Industry was only another political office to fill.⁴³

(h) That it should not include Texas fever.⁴⁴

In support of the bill the arguments were:-

(a) That it would protect the agricultural industries and the farmers were demanding it. "Farmers are not lobbyists, they leave it to Congress to act."⁴⁵

(b) That it would satisfy foreign markets.⁴⁶

(c) That it would prevent the spread of pleuropneumonia west of the Alleghanies.⁴⁷

(d) That it was necessary legislation; first because state action was not sufficient, and second, because England was about to pass a bill requiring the assurance with cattle imported that there was no disease in the country from which they came.⁴⁸

An amendment by Miller (California) was adopted to strike out "paying half the expense of the slaughtered animal." The amount made immediately available for the Bureau was reduced to \$150,000, and Texas fever was not considered a contagious disease. The bill was passed by the Senate, April 29, 34-9, 33 absent. The House voted to non-concur with the Senate amendments, but agreed after the report of

the Conference and the President approved the bill, May 29, 1884.

5. Provisions of the Act.

The act provided for a Bureau of Animal Industry with a competent veterinary surgeon as chief and two agents who were to be appointed by the Commissioner of Agriculture from stock raisers or experienced business men.

The purpose of the Bureau was to investigate and report on the conditions of disease in the United States and on the means of prevention and cure. Special investigation was to be made of pleuropneumonia but Texas fever was not to be considered a contagious disease.

To carry out the purpose of the Bureau, the Commissioner of Agriculture was to make rules and regulations and to invite state and territorial "authorities to cooperate in the execution and enforcement." The powers of the Commissioner extended over the District of Columbia.

The interstate transportation and the exportation of diseased live stock was prohibited. The penalties were \$100 to \$5,000 or one year's imprisonment, or both, for transporting diseased live stock after the notice had been given.

The United States District Attorneys were to prosecute all violations before any district or circuit court of the United States or Territorial Court in the district where the violation was committed.

A sum of \$150,000 was to be immediately available to

carry the act into effect, and an annual report was to be made to Congress by the Commissioner of Agriculture.⁴⁹

IV. Later Legislation. 1884-90.

1. Reasons for Later Legislation.

During the period, 1884-90, much was accomplished by the Bureau of Animal Industry in preventing the spread of pleuropneumonia, but the Bureau asked for more authority and men to carry on the work. President Cleveland, 1885, recommended the suggestion made by the Commissioner of Agriculture.⁵⁰ The Bureau found difficulty in securing the cooperation of the states. The idea prevailed that prosecution would not be countenanced for such offenses because many cases were dismissed by justices of the peace and grand juries.⁵¹

During this period, nine bills were introduced to amend the act of 1884, but received no consideration. Of these, only one came from an eastern state (New York).

2. Bill Passed by the Senate.

Miller (New York) on December 20, 1886, introduced a bill which was reported, amended, and passed by the Senate, February 28, 1887. The amendment, by Van Wyck (Nebraska) met the demands of Iowa to include "swine plague, hog cholera, and other diseases of swine."⁵² There was no action by the House.

3. House Bill in 1887 - Came to No Conclusion.

A House bill, to amend the Act of 1884, was introduced by Hatch (Missouri) on January 11, 1887. It was reported and debated, but no conclusion was reached.

The bill provided that the Commissioner might employ a sufficient number of men (instead of 20) to carry on the work, and to give him power under state law to condemn private property for public good, to destroy it and pay a certain valuation.

The principal arguments against the bill were that it increased expense by allowing an unlimited number of men for the Bureau, and by paying owners for condemned animals. McMillan (Tennessee) considered it unconstitutional, and McAdoo (New Jersey) preferred to "see the herds perish rather than this cardinal principle of local self government be stabbed by this bill."⁵³

Funston (Kansas) explained the importance of the bill for agriculture interests but regretted that Congress hesitated to give \$250,000 to change conditions and save \$1,200,000,000 worth of cattle in the United States.⁵⁴

4. Rider on Appropriation Bill, 1887.

Conditions were partly remedied by a rider on the appropriation bill for 1887. It provided for \$100,000 to prevent the spread of pleuropneumonia and to purchase and destroy diseased or exposed animals.⁵⁵

5. Senate Bill in 1888 Came to no Vote.

By 1888 the Bureau of Animal Industry had been quite successful in eradicating and preventing the spread of pleuropneumonia, as only a few infected districts were left, according to the President's annual message.⁵⁶

A bill was introduced into the Senate that year by Palm-

er (Michigan) for "a Bureau of Animal Industry and Animal Diseases", and a substitute was reported, considered, but did not come to a vote.

The reason for the bill was that the Commissioner of Agriculture had too many duties, so too much was left to clerks with no authority. The bill provided that a new Bureau of four men was to be appointed by the President with the approval of the Senate, with the Commissioner of Agriculture at the head of the board. Of the four, two were to be practiced cattle growers and one a veterinary surgeon. The board was to employ veterinary surgeons to carry on the work.

In the debate in the Senate, the bill was opposed on the argument that the existing Bureau had been efficient and it was unconstitutional to destroy property without trial by jury. The supporters of the bill held that it cost the United States more if cases were left to state authorities under the veterinary surgeons and cited the Illinois epidemic as an example. The last three days on which the bill was to be considered, other business took up the time until adjournment.⁵⁷

V. Meat Inspection.

The movement for meat inspection was due to European Restriction on American meats and animals. During the period, 1880-90, attempts had been made, but without success, to have the restrictions removed because of the injury to American Commerce.⁵⁸

The agitation increased after 1885 because the reports showed that the conditions had been improved thru the work of the Bureau of Animal Industry.⁵⁹ A number of the bills introduced contained a retaliation clause due to the feeling of unjust discrimination by certain European countries.

1. Meat Inspection Bill Passed by Senate, 1887.

Edmunds (Vermont) introduced a Senate bill December 12, 1887, for meat inspection for exportation and to prohibit importation of adulterated articles of food and drink, which was reported with amendments and passed by the Senate, March 21, 1888, but was not considered in the House.

The bill had been so carefully considered by the Committee that immediate action was asked for it. An amendment by Fvarts (New York) was adopted relating to the place of packing meat for export.

2. Senate Resolution.

A joint resolution was presented, May 1, 1890, in the Senate from the Committee on Transportation and sale of Hears, "That the President of the United States try to get the abrogation of the law which requires cattle to be slaughtered at the port of entry." Vest (Missouri) in presenting the resolution, explained the injustice of the restriction because the cases found among American cattle had not been pleuropneumonia according to the United States authorities and because the disease was then found in but three counties in the United States. He added that English newspapers con-

sidered the McKinley tariff bill as a commercial war on British merchandise, yet it did not prohibit entrance to all cattle without duty.

The resolution was passed by the Senate as a concurrent resolution since it was an international question,⁶⁰ but no further action was reported.

With the resolution, Vest introduced a Senate bill from the Committee on Transportation "to inspect live cattle and beef for export", which was passed without amendment at Vest's request on June 11, 1890. No action was taken on the bill by the House. The bill provided for inspection of cattle for export to foreign countries, and of all stock for meat sent from a state to other states and territories.⁶¹

3. Meat Inspection Acts - Legislative History.

The first successful meat inspection bill was introduced in the Senate, February 11, 1890, by Edmunds (Vermont). It "provided for an inspection of meats for exportation, prohibited importation of adulterated articles of food and drink, and authorized the President to issue proclamations in certain cases." The Committee on Foreign Relations reported the bill without amendments on March 5 and with amendments March 11.

On April 5, the bill was brought up and passed by the Senate after a brief discussion. Paddock (Nebraska) said the reason for the bill was that meat inspection in some cities was very imperfect. Several similar bills were presented in

the Senate, but that one suited the packers. The Federal government had power to inspect exported meat and that transported from one state or territory to another, but the difficulty was met when it came to the question of jurisdiction of state authorities and of Federal government. Plumb (Kansas) said packers has opposed meat inspection before that largely because some firms had built up trade for themselves and "did not want it understood that all American food was good." An amendment by Sherman (Ohio) was adopted to inspect meats where packed or stamped, or at the place of exportation if not done when packed, and the bill was passed by the Senate April 5.

Four months later, the Senate bill was taken up in the House. Funston (Kansas) from the Committee on Agriculture, reported the Senate bill and explained the reason for the bill - to satisfy foreign markets that American meat was wholesome. The United States was not certain that the allegations against the meat products had any foundation, but it was their duty to relieve it of such condemnation which would add at least \$50,000,000 to the meat exports from the United States. The Committee felt the discriminations had been unfair, and "the bill would give us the power to deal with them as they with us."⁶²

The bill met with little or no opposition in the House. The feeling was strong for retaliation. They were certain that foreign markets would be regained if they could say, through the President's proclamation, "Until you do this

(withdraw the prohibition), we shall shut out everything you desire to ship into this country."⁶³ Reference was made to the effort made by the American Minister, Whitelaw Reid, in France, to have the restrictions withdrawn. He had tried to show France that the prohibition had not affected the health of the people, nor benefited the farmers or consumers. Reid had visited the United States in the spring of 1890 while this bill was in Congress and he urged action in the United States because American meat was kept out for want of inspection.⁶⁴ The common opinion was that France had no basis for discrimination, but Brosius (Pennsylvania) said, "We owe it to ourselves that not one pound of the suspect goods shall be suffered to leave our shores without a certificate of character from an inspector under the seal of the United States."

Morgan (Alabama) offered an amendment to include lard, but it was rejected because the bill should be limited "to international affairs" and it might prevent the passage of the bill.

The bill was passed by the House, August 20, with two amendments from the Committee, adding "drugs" and inserting "with the knowledge of the owner of the vessel." The Senate concurred and the President approved the bill, August 30, 1891.

4. Provisions of the Act of August 30, 1890.

The act of 1890 prohibited the import and export of infected cattle, export of unwholesome meats, and import of

adulterated foods, drugs and liquors.

Imports from foreign states which discriminate against American products might be excluded. Adulterated foods, drugs, or liquors imported into the United States were to be forfeited and inspected as the Secretary of the Treasury prescribed. By proclamation, the President might suspend the importation of these imported articles.

The Secretary of Agriculture was to cause meat inspection to be made at the place of packing or stamping, or at the place of exportation, and the required certificates to be filed.

The penalties were \$1,000 fine or one year's imprisonment for forging a certificate.

All imported cattle were to be quarantined and those found diseased or exposed were to be slaughtered and the owner compensated. No infected or exposed cattle were to be exported. The expense of all the inspection and disinfection of exported animals was to be borne by the vessels on which the animals were exported.⁶⁵

5. Inspection Act of March 3, 1891. - Legislative History.

During the time the former bill was in Congress, Paddock (Nebraska) introduced a Senate bill, June 24, 1890, "to provide for inspection of live cattle, hogs, and carcasses and products thereof, which are subjects of interstate commerce," which was reported favorably, considered, and passed by the Senate without debate on September 18. The

only change was adding the words "District of Columbia" after "Territory."

The Senate bill was reported in the House on February 11, 1891, and considered and passed on March 2.

Mills (Texas) presented the strongest arguments against the bill - that no greater power was ever given than this bill gave to the government over private property. It would be better to choose the occupations of the people than to deprive them of their property rights. Some held that it would require an army of inspectors to carry on the work for all the slaughter houses.

Stockbridge (Maryland) said there was a cry for pure food over the whole United States, and that meant meat, too. Hatch explained the provisions of the bill which related only to animals to be slaughtered and not to traffic or commerce in live cattle between the states. His amendment was adopted to prevent condemnation and destruction of the diseased animals. The rules were suspended and the bill passed the House the same day. The Senate concurred, and the President approved the bill March 3, 1891.⁶⁶

6. Provisions of the Act of 1891.

The act provided that the secretary of the Treasury was to make the rules and regulations for the inspection of all animals before slaughter for interstate commerce and for a post-mortem examination if he considered it necessary. The carcasses, which were marked unsound could not be transported from the state, Territory or District of Columbia.

A careful inspection was to be made of all live cattle the meat of which was to be exported to foreign countries, and three certificates to be given stating the conditions in which such cattle and meat were found. No clearance was to be given to a vessel carrying fresh beef to foreign countries until the certificate was presented from the inspector.

The penalties were \$1,000 fine or one year imprisonment for forging or destroying the official marks or stamps used by the inspector on inspected meats.

The act did not apply to animals killed by farmers unless the carcasses were sent to canning establishments.⁶⁷

VI. Results from Legislation

President Harrison, in his annual message in 1890, spoke of the progress made by the Secretary of Agriculture in establishing the healthfulness of American meats. The veterinary surgeons sent out by the Department to participate in the inspection of cattle from the United States to English ports had found no pleuro pneumonia in the seven months they had been on duty. That inspection and the meat inspection act of 1890 would make a perfect guarantee for the foreign markets.⁶⁸

The Bureau of Animal Industry reported 394,607 cattle exported in 1891, the greatest number for any one year. The largest number in a preceding year was 190,513 in 1884, the year in which the Bureau was established.⁶⁹

The appropriations for carrying out the Act of 1884 were as follows:

1884 - \$ 50,000	1888 - \$500,000
1885 - 100,000	1889 - 500,000
1886 - 100,000	1890 - 350,000
1887 - 500,000	1891 - 500,000 ⁷⁰

This sum was small in comparison with the loss of European markets, which were estimated to be \$20,000,000 yearly.⁷¹ In December, 1891, the French prohibition was repealed and German action soon followed.⁷²

CHAPTER V.
OLEOMARGARINE

I. History of Oleomargarine.

The product known as Oleomargarine was the outcome of a prize offered by Napoleon III in 1867 and was patented by Mege Mouries in 1869.¹ It was made by churning ten pounds of oleo oil, four pints of milk, three pints of water, and annatto for coloring, at a temperature of 100° to 120° F. The oil was extracted from beef fat by heating it in water, carbonate of potash and sheep's stomach to 113° F. After cooling, this fat was submitted to hydraulic pressure to separate the oleo oil from the stearin.²

A process for the manufacturing of oleomargarine was patented in the United States in 1873 by Paraf, a chemist, who organized a large manufacturing company in New York. Mege Mouries patented his process in the United States later in the same year and fifteen factories were established within eight years using this patent.³ The manufacturers of oleomargarine did not follow closely the original formula and many different fats went into the oleo steaming vat, among these were hog and horse fat, cotton seed oil, Sesame, peanut oil, rancid butter and materials once used only for candles. So "Oleomargarine was dreaded as a vehicle for infecting the human system with trichina" and disease germs. Examination of samples revealed poisonous substances used in the process of manufacture.

The butter industry was threatened because Oleomargarine was cheaper and resembled it so closely that it was often sold as butter.

II. Legislation.

1. Early Attempts.

The first attempt to legislate on Oleomargarine was in 1880. From 1880 to 1885 eleven bills were introduced in Congress to regulate the manufacture and sale of Oleomargarine, but only one was referred to the calendar. Five of these were introduced by representatives from New York and six from the North Central States.

2. Resolutions.

Parker (New York) January 22, 1884, introduced a resolution that the House Committee on Agriculture be instructed to inquire into the manufacture of oleomargarine, and obtain facts regarding materials and mixtures. The committee reported the resolution favorably, February 7, with the amendment, "to this end the said Committee is empowered to send for persons and papers", but no action was taken.⁴

Two years later, 1886, a resolution was introduced in the House, "that a Committee on Judiciary be instructed to report what power Congress has under the Constitution to prohibit the manufacture of adulterated butter, cheese and other foods". The Committee reported, April 22, that Con-

gress had no power "to prevent the production of anything by a person in a state of the Union. Congress may prevent it in the District of Columbia or in a territory where it has exclusive jurisdiction. Congress may act upon the production of oleomargarine (1) through its power to regulate commerce, (2) to tax the article so heavily as to prevent its production. The Committee does not think Congress can forbid or restrain transportation of any article from one state to another. It can regulate its transportation. The Committee thinks Congress may lay the tax if it be needed for revenue, but does it against right if only to restrain and destroy the use and sale of the article in question."⁵

3. Legislation in 1886.

Nine bills were introduced in Congress (six from New York and Vermont, three from the North Central states), in 1886, relating to oleomargarine but were not considered.

(a) Legislative History.

Hatch (Missouri) April 28, 1886, introduced a bill in the House "defining butter, also imposing a tax upon and regulating the manufacture, sale, and importation and exportation of oleomargarine." The substitute bill was reported, considered and approved August 5, 1886.

In the debate in the House, the arguments in opposition were:

(a) That it was legislation for one industry at the expense of another.⁶ It was protection gone mad.⁷

(b) That it was unconstitutional, because Congress had no more right to make such a law than to make a uniform divorce law.⁸

(c) That it would raise the price of butter, which would be a hardship on the poor.⁹

(d) That it was legislating against a healthful article of food.⁹

(e) That it was legislating against a needed article of food, because the cows could not furnish all the butter that was needed.¹⁰

(f) That it was a Federal attempt to determine by internal tax what people shall eat and drink.¹¹

In support of the bill the arguments were:

(a) That it would protect the agricultural interests, which needed protection, (1) because dairying was more profitable than wheat raising¹², (2) 5,000,000 men were engaged in that occupation, and third, Iowa alone had been damaged \$1,000,000 a year by the production of oleomargarine and one third of the creameries on the Illinois Central Railroad had closed.¹³

(b) That it provided for needed revenue for fortifications and would lighten the tax on necessities for the poor.¹⁴

(c) That it was constitutional for Congress had the same right to tax oleomargarine as whisky.¹⁵

(d) That it legislated against an article that was injurious to health, and which was an insult to the poor.¹⁶

(e) That it was opposed by the boards of trade which were influenced by oleomargarine manufacturers like Armour's.¹⁷

(f) That it was necessary as states were unable to control the manufacture of oleomargarine alone.¹⁸

(g) That it was demanded by the public from the number of petitions presented.

Witch, in closing the debate, said the bill had aroused much antagonism because it came from the Committee on Agriculture. When any bill came up to aid agriculture, the corporations and monopolies brought up the constitutional objections - but railroad and corporation bills were never called unconstitutional. The only important amendment adopted was introduced by Meadon (New Jersey) to change the tax to five cents a pound. The bill was passed, 177-101, 45 not voting.¹⁹

In the Senate, the House bill was reported June 4, and after discussion it was voted to refer it to the Committee on Agriculture and Forestry.

The arguments in opposition to the bill in the Senate were:

(a) That it destroyed states rights and violated the constitution.²⁰

(b) That it was class legislation and would injure the southern farmers.²¹

(c) That it was a bad precedent. "No precedent so vici-

ous -- on our statute books" and would lead to legislating on adulteration of coffee and other foods.²²

(d) That it destroyed one interest for the good of another.²³

(e) That it legislated against a healthful article of food²⁴ and the poor would have to pay more for butter.²⁵

(f) That it was unnecessary for revenue, as the treasury had a surplus, therefore any benefit from the tax would be for industrial discriminations not for the treasury.²⁶

(g) That it, by a tax, gave congressional sanction to a fraud; oleomargarine was wholesome if taxed, but unwholesome if not taxed.²⁷

In support of the bill, the arguments were:

(a) That it provided protection for agricultural interests, which was necessary because of the amount invested and without protection the farmers would become tenants. The value of cows had decreased, creameries had closed, and 300,000 milch cows had been slaughtered in one year.²⁸

(b) That it would protect the people against a fraud, for oleomargarine should be sold as oleomargarine.²⁹

(c) That it legislated against an article that was dangerous to public health, because it contained poisons, germs, and was indigestible.³⁰

(d) That it would aid the states in preventing adulteration of butter.³¹

(e) That it would place American butter on an equal with that of Canada. The manufacture and sale of oleomargarine in Canada was prohibited and her butter sold better than that from the United States.³²

An amendment by Ingalls (Kansas) to reduce the tax from five to two cents a pound was adopted and the bill passed the Senate, 37-24. The House, July 23, voted to concur, 175-75, 72 not voting, and the President approved the bill August 5, 1886.³³

President Cleveland, in his "Oleo Message", said that much interest had been shown by the people in the oleomargarine bill and he had been urged to take favorable action on it. Those opposing the legislation argued that it tended "to break down the boundaries between the proper exercise of legislative power of Federal and state authority." If he had believed that the purpose was to destroy one industry for another he would have felt "constrained to interpose executive dissent." If oleomargarine had the merits that were claimed for it, the tax would still permit a profit to the manufacturer and dealer. On the other hand, no industry was better entitled to the incidental advantages of this legislation than the farming and dairying interests.³⁴

(b) Provisions of the Act of 1886.

The act defined butter as a food made exclusively from milk or cream, with or without salt or coloring matter. The

term oleomargarine included all products known as oleomargarine, oleo, butterine, lardine, suine, neutral, all lard extracts, tallow extracts, and all mixtures and compounds of animal and vegetable fats.

The manufacturer of oleomargarine was to pay \$600 license tax; wholesale dealer \$480; and retailer \$48 per year. The manufacturer was required to keep books and render reports as prescribed by the Secretary of the Treasury.

Oleomargarine was to be packed in wooden packages of ten pounds and stamped, and penalties were imposed for buying or selling if not stamped. The sales by the manufacturer and wholesale dealers were to be in original, stamped packages, containing not less than ten pounds, and sales by retail dealers were to be only from original stamped packages, in quantities not exceeding ten pounds and to be retailed in suitable wooden or paper packages.

A tax of two cents a pound was to be paid by the manufacturer and represented by coupon stamps which were to be destroyed before the contents was removed. Imported oleomargarine was taxed fifteen cents a pound besides the regular tax.³⁵

III. Report on Oleomargarine.

The Secretary of the Treasury reported four months after the act was passed that there were thirty-four manufacturers of oleomargarine, 294 wholesale dealers, and 2,415 retailers in the United States. During that time 4,430,174 pounds of

oleomargarine were assessed at two cents a pound.³⁶

For the four years following the act, the Commissioner of Internal Revenue reported:

	1887	1888	1889	1890
Manufacturers -	32	29	23	21
Wholesale dealers - - -	236	154	160	151
Retailers - -	3929	3274	3906	3256
oleomargarine produced -	32,513,537		35,664,026	32,324,032 ³⁷

CHAPTER VI.

LARD

I. Reasons for Legislation.

Lard adulterated with cottonseed oil and beef stearin became a common article of trade from 1880-90 and foreign countries began to discriminate against it. France placed a high duty on adulterated lard, but allowed pure lard to enter free.¹ England required labels to be placed on "Refined lard". Several merchants in England had been arrested and fined for selling American adulterated lard. One of the newspapers congratulated the chemists that they were "able to cope with the smartness or roguery of our American cousins."² German merchants were having difficulties in selling American lard because of adulteration.

It was alleged that the amount of refined and compound lard had increased so rapidly that prices of hogs and hog lard had decreased, and it was affecting the swine raising industry. Estimates of adulteration varied from 25 to 40%. From 300,000,000 to 320,000,000 pounds of compound lard were produced annually, which was equivalent to the lard of 3,-150,000 hogs.³ The extensive use of cottonseed oil as an adulterant was becoming a source of wealth for the Southern states, and in the attempt to legislate to tax adulterated lard, the representatives from those states defended its use, while those from hog raising states defended pure lard.

The common opinion of the opposition was expressed in the

Louisiana remonstrance to Congress, February 13, 1888, which held if such legislation was considered, it was the most vicious kind of class legislation, discriminating against the producers of cotton seed oil in favor of those producing hog lard. Cotton seed oil was a pure vegetable oil and lard was often impure because from diseased hogs. Europe used it in making olive oil and considered it healthful. The law would be a blow to the greatest industry of the south, the section which was just "emerging from a period of depression and reaching prosperity. Congress should make no laws tending to check its progress or mar its prosperity."⁴

II. Legislation.

1. Bills and Petitions.

During the period, 1887-92, twelve bills were introduced "to define lard and impose a tax upon and regulate the manufacture, sale, importation, and exportation of compound lard" but were not considered. Eight were from northern states. Of the petitions presented, 279 were for the legislature to prevent adulteration of lard, and 286 opposed legislation. Many petitions came from granges. Even European merchants urged the legislation.

2. Legislative History of the Conger Bill.

Conger (Iowa) on July 28, 1890, introduced the lard bill which was reported July 30, considered and passed by the House, August 28.

The arguments in opposition to the bill were:-

- (a) That it would ruin the sale of cotton seed oil.⁵
- (b) That it was class legislation - against the negro of the south.⁶
- (c) That it protected one industry at the cost of another.⁷
- (d) That it taxed the healthful article.⁸ It should label but not tax lard.
- (e) That it violated the spirit of the constitution.⁹
- (f) That it should give way for the General Food Bill on the Calendar.¹⁰

The arguments in support were:-

- (a) That it protected the hog industry.¹¹
- (b) That it was demanded by the farmers and we legislate too little distinct legislation in the interests of agriculture."¹²
- (c) That it would insure American lard for foreign markets.¹³
- (d) That it would meet the popular demand for pure food, because it was another step after meat legislation.¹⁴
- (e) That it would improve business morale.¹⁵
- (f) That it was necessary because existing laws were inadequate.¹⁶

Mason (Illinois) introduced a Pure Food Substitute for the Conger bill and Oates (Alabama) moved to recommit the bill with the provisions of the substitute. The motion was rejected, 41 - 115, and the Conger bill was passed by the

House, August 28, 1890, 126 - 33, 167 not voting, but no action was taken on the bill in the Senate.

The bill, as passed by the House, defined lard as a food made exclusively from swine fat. Manufacturers of compound lard were to pay a license of \$96; wholesale dealers, \$24; and retail dealers fifteen cents a month. All compound lard was to be stamped as such with the name and location of the factory.

LEGISLATION FOR THE DISTRICT OF COLUMBIA

I. Special Legislation.

Food legislation for the District of Columbia was not the problem that it was for the United States as a whole, because it is under the jurisdiction of Congress, which merely gave its approval to the recommendations of the Committee on the District of Columbia. Ten bills were introduced and the most of those were passed with little or no debate.

1. Animal Inspection.

During the period of agitation for legislation on animal diseases, 1876 - 82, three bills were introduced but not reported for the care and inspection of animals to be slaughtered in the District of Columbia, and to incorporate the Washington stockyards, abattoir, and Rendering Companies. The later acts for Federal inspection included the District of Columbia, so there was no need for further attempts.¹

2. Flour.

Four bills were passed relating to flour inspection in 1871, 1873, 1898 and 1900. The act of 1871, requiring that the weight and purity be stamped on the barrel, was amended by the later acts, first requiring the degree of quality to be marked as "Family", "Extra", "Superfine" -- and a fine of one dollar a barrel if sold without inspection; second, by adding the word "sack", because adulterated flour was put in sacks instead of barrels, and third, by imposing the fine of

one dollar for selling the half barrel or sack without inspection.²

3. Oleomargarine.

Before the Federal movement to regulate the manufacture and sale of oleomargarine, a bill was approved, 1879, that "any article made in the semblance of butter or cheese; not the legitimate product of the dairy and not made exclusively of milk or cream" should be stamped with the work "Oleomargarine" on every box or package in Roman letters one and a half inch square.³

4. Candy.

A candy bill was approved May 11, 1898. The reason for the bill was the omission of the word "candy" in the pure food bills, and the Board of Commissioners for the District of Columbia requested that a special bill be passed. The act provided that "no one could manufacture for sale, or knowingly sell, or offer to sell, candy adulterated by admixture of terra alba, barytes, talc, or any other mineral substance, poisonous colors or flavors, or other ingredients deleterious or detrimental to health."⁴

II. General Pure Food Legislation.

1. Legislative History of Act of 1888.

The District of Columbia had a general pure food law eighteen years before one was passed for the United States.

1. Three bills for a pure food law were introduced but not considered between 1884-87. In 1887, December 12, Call (Florida) introduced a Senate bill to prevent the manufacture and sale of adulterated foods in the District of Columbia,

which was reported by a substitute, that was passed, and approved October 12, 1888.

The substitute was passed by the Senate without debate, and by the House with an amendment, that the "manufacture of any article of food which shall be composed in whole or in part by diseased, decomposed, offensive, or unclean animal or vegetable substances "shall be prohibited," and the Senate concurred in the amendment.⁵

2. Provisions of the Act of 1888.

The act of 1888 provided the manufacture and sale of injurious and adulterated articles of food and drugs were to be prohibited. "Food" was defined as any article of food or drink used by man, except water. "Drugs" was any medicine for internal or external use. Articles of food and drugs were to be of the quality demanded by the purchaser, but a person was not held liable if he proved he sold the article as an innocent party, or if the sale was accompanied by a written warranty that the articles had been purchased for the quality demanded by the purchaser.

The purchaser was entitled to have the articles analyzed, and to receive a certificate stating the results. To refuse to sell samples for analysis was an offense subject to a fine of \$50.00.

Analysis was under the control of the Commissioner of Internal Revenue, with rules prescribed by the Secretary of the Treasury. A list of exempt articles was to be published by

the Commissioner of Internal Revenue.

The oleomargarine act was not affected.⁶

3. Attempts to Amend the Act of 1888.

Four bills were introduced, 1890-1897, to amend the act of 1888, and one by McCormick, (New York) passed the House, January 6, 1896, with an amendment from the Committee on the District of Columbia, that "if more than one quality of food or drug is known by the same name, the best shall be furnished to the purchaser, unless he requests other or is notified of other." and "if dealer proves to the court he purchased a drug as the same in nature, substance, and quality, as demanded of him by the purchaser, he cannot be prosecuted." No action was taken in the Senate.⁷

PART II.

CHAPTER VIII
GENERAL PURE FOOD MOVEMENT.

I. General Pure Food Movement. 1879 - 1890.

Special subjects had received consideration up to 1890, but a general pure food movement began in 1879. Wright (Pennsylvania) introduced the first bill to prevent adulteration of articles of food and drink, but this bill never left the Committee on Commerce, to which it was referred.

In the period from 1879-1890, twenty-seven other bills were introduced of which only five were ordered printed or placed on the calendar. In the report of the Committee on Manufacturers on one of these bills, Beale (Virginia) spoke of the adulteration of a number of articles and added, "It is evident that concurrent legislation by states would protect the citizens against adulterations of food and drink -- but such is not within the range of hope in the near future." The Committee recommended the passage of the bill, but there was no action taken.

The movement during the eleven years was due to no one section of the country, nor to any particular man or group of men. Only three men introduced as many as two bills. But the public was becoming interested in the subject of Pure Food as shown by the number of petitions urging legislation for it. In all, there were 366 petitions. They came from groups of citizens of different states, Boards of Trade,

Boards of Health, Chambers of Commerce, Granges and individual firms.

II. Resolutions - 1887 and 1888.

Brown (Indiana), in 1884, expressed an opinion, common to many in Congress at that time, in his objections to a House resolution that the "Committee on Public Health investigate adulteration of food and send for persons and papers." He said there was no need for this expense as there had always been adulteration of food and such regulation was the duty of the states and not the duty of Congress. Cox (New York) was no more sympathetic toward the resolution than Brown. He said "The general welfare clause of the constitution does not recognize this everlasting Federal intermeddling in matters connected with local affairs." The resolution was lost in the House, 124 - 114.

In 1888, Morgan (Alabama) submitted a resolution that "The Committee on Judiciary (in the Senate) inquire whether Congress has power to prohibit adulteration of food, and if so, is it power of taxation or regulation of commerce, foreign or between states, or is it a distinctive power of Congress," but nothing was done with the resolution.

III. Legislation.

Many bills for special legislation had been before Congress during this eleven years, and laws, as traced in the previous chapters, were enacted on drugs, tea, oleomargarine, meat inspection, animal diseases, Bureau of Animal In-

dustry, and for the District of Columbia on flour, oleomargarine, cheese, and pure food. During the debates on special subjects, congressmen were asking, why not include all articles of food in one bill, why make so many special laws, By 1890, it was evident that a general law for food and drugs was winning favor.

CHAPTER IX

CHEESE

I. Filled Cheese - Need for Regulation.

"Filled Cheese" was an article of food made of skimmed milk, oleo oil, neutral lard or renovated butter. Patents were issued for the process and mixing machines about 1871 at Ridge Mills, near Rome, New York. Soon many factories were fitted up to make the new cheese.

Because it was not sold under its real name, reputable merchants and exporters refused to handle it. This greatly affected the foreign trade in cheese. In 1894 the United States lost twenty-one percent of its cheese trade with England, while Canada by her strict regulations, gained.¹ The American agent and correspondent reported in 1895 that, "United States cheese is the poorest in quality that reaches English markets and the British public are not only aware of the fact but prejudiced against it, because so much in the past has been adulterated."²

The Department of Agriculture urged National Legislation as the only remedy. It believed that all cheese should be taxed, branded and stamped, and sold under the Revenue laws. The National and State Dairy Associations urged inspection and legislation of dairy products. Thirty-three petitions asked for this legislation. It was a question of legislation to regulate the cheese industry or lose the foreign trade in that article. This is shown by the exports of cheese from New York, from 1863-1896, as compared

with Montreal. In 1895, "Canada was maintaining, with strenuous care, the quality of her export." The United States lost 21% of its previous years cheese business to England, and all other countries increased.³

	From New York	From Montreal
1888	1,389,000 boxes	1,860,000 boxes
1889	1,291,000 "	1,229,000 "
1890	1,264,000 "	1,347,000 "
1891	1,320,000 "	1,628,000 "
1892	1,107,000 "	1,575,000 "
1893	1,279,405 "	1,847,546 "
1894	852,186 "	1,893,412 "
1895	966,014 "	2,016,616 "
1896	600,000 "	2,148,854 " ⁴

II. Legislation on Cheese.

1. Legislative History of the Act of 1896.

Two bills were introduced in the House in 1895-6, by Cook (Wisconsin) and Wilbur (New York), and referred to the Committee on Ways and Means, which reported a substitute on April 26, 1896. The substitute was reported, considered, and approved June 6, 1896.

The arguments against the bill in the House were:

1. That it was legislation for one industry to benefit another, and discouraged home production.⁵

2. That it taxed the poor man's article of food, and prevented the production of the cheaper article.⁶

3. That it enlarged the scope of internal revenue system which should be cut off instead.⁷

4. That it set a bad precedent of dealing with every inferior article.⁸

5. That it was unconstitutional.⁹

6. That it should require branding, but not the taxing of cheese.¹⁰

The arguments for the bill were:

1. That it was necessary to save the foreign trade in cheese, which was taken over by Canada.¹¹

2. That it supplemented state efforts for regulating the article.¹²

3. That it would end fraud by placing filled cheese under revenue officers.¹³

4. That it would protect the farmers, provide revenue, and protect the consumer against fraud.¹⁴

The bill was passed by the House, with Terry's amendment fixing the minimum for violation at \$100, on April 11, 1860 - 58, 36 not voting.

In the Senate the House bill was reported by Sherman (Ohio) on May 22, with amendments added by the Committee on Finance, reducing the license tax from \$400 to \$250 for manufacturers, and \$200 to \$50 for wholesale dealers.

The arguments in opposition to the bill were:

1. That it was not to raise revenue but to bring the product within the police power of Congress, so the bill was

a greater fraud than the cheese.¹⁵

2. That it was like the oleomargarine bill, in discriminating against a food product.¹⁶

3. That it was intended to drive out a product as the State Bank tax had done.¹⁷

4. That it was special legislation and they would have to legislate on every article if this continued.¹⁸

The arguments in support of the bill were:-

1. That it was legislation against an article of food injurious to health.¹⁹

2. That it was essential for the protection of the people, and the tax only paid for the enforcement of the regulation.²⁰

3. That it was to protect the farmers, and to prevent fraud.²¹

4. That it was essential, as state laws against filled cheese were ineffective.²²

5. That its purpose was to raise revenue and require filled cheese to be stamped.²³

During the debate, there were several attempts to defeat the bill by adding amendments - taxing coffee, tea, lager beer, etc., which were not related to the bill, but all were tabled. The amendment, by the Committee on Finance, reducing the license tax, was rejected by the Senate, and the bill was passed without amendments June 4, 37 - 13, 39 not voting and was approved by the President June 6, 1896.

2. Provisions of the Act.

The act defined cheese "as the food product known as cheese and which is made from milk or cream and without the addition of butter, or any animal, vegetable, or other oils or fats - - - with or without coloring matter," and "filled cheese" was any substance made of skimmed milk with the addition of butter, animal or vegetables oils or fats, or compounds foreign to milk, and made in imitation of cheese.

The special taxes were, for the manufacturer, \$400; wholesale dealer, \$250.; and retail dealers, \$12 per year. A tax of one cent a pound on filled cheese was to be paid by the manufacturer, and eight cents a pound to be paid on imported filled cheese.

The cheese was to be packed in new wooden packages, marked, stamped and branded, and to be retailed only from the original package.

The manufacturer was to keep books and render reports, and conduct his business as the Commissioner of Internal Revenue, acting under regulations of the Secretary of the Treasury, may prescribe.

Penalties were fixed for violation of the taxing, the branding, purchasing without being stamped, and destroying stamps.²⁴

3. Act in Operation.

The report of filled cheese for the five years following the act was:-

	Produced	Revenue Receipts
1897	1,663,067 lbs.	\$ 18,992.38
1898	1,402,461	16,518.55
1899	1,688,650	18,098.42
1900	1,574,979	17,064.48
1901	1,305,459	14,652.64

The filled cheese industry declined, and in 1901, there were five manufacturers and three retail dealers reported.²⁵

III. Cornell V. Coyne. - 1904.

The taxing provision of the act of 1896 was tested in the Cornell V. Coyne case before the United States Supreme Court in 1904. The plaintiff protested against affixing stamps to cheese under contract to be exported, and held it was unconstitutional to tax exports.

The court opinion, as rendered by Brewer, was that "the prohibition in the constitution against taxes and duties on exports did not relieve the articles of manufacture for export from prior ordinary burdens of taxation which rested on all property similarly situated." Why Congress granted exemption from the manufacturer's tax for exported tobacco and not for filled cheese was not for the Court to determine.²⁶

TEA

I. Reasons for legislation

The act of 1883 had not prevented the importation of adulterated tea, because it had not provided for a board of experts to fix the standards. Complaint was made that much of the tea imported from China was inferior and adulterated. It came to America in tight boxes, which caused it to sweat and lose its flavor, so that tea dealers were asking for legislation for more careful inspection.¹

II. Legislation.

Eight bills were introduced in Congress, from 1890 - 1897, to prevent the importation of impure and unwholesome tea, but were not considered.

White (Illinois) from the Committee on Commerce submitted a report and bill, February, 1897, which was considered, passed by both houses without debate, and approved by the President March 3, 1897. Payne (New York) said, in urging the legislation in the House, that more bad tea was imported into the United States than into any other country, largely because the law had allowed inspectors to be appointed from the importers, and so tea dealers were asking for this bill.²

The act provided for seven inspectors to be appointed by the Secretary of the Treasury, with a salary of fifty dollars per year. They were to meet each year and to fix

standards of purity and fitness, embodied in samples of which a set was to be sent to New York, Chicago, San Francisco, and other ports as the Secretary of the Treasury designated. Any tea which was not up to the standards set, was to be sent out of the United States within six months.³

CHAPTER XI.

OLEOMARGARINE

I. Reasons for Further Legislation.

The legislation on Oleomargarine by the Federal government in 1886, and by the states to 1890, was not sufficient to regulate the manufacture and sale of oleomargarine when colored to resemble butter. Thirty-two states had laws regulating oleomargarine as to branding, taxing, or coloring. In two states, West Virginia and Vermont, the law required that it should be colored pink. There was complaint that the manufacturers encouraged evasion of the law by sending such statements to the retailers as, "We promise and guarantee you protection against state laws to the extent of paying costs of prosecution, fines . . . pertaining thereto."¹ It was said they sent out color cards with the stars and stripes and the words "Stand by your colors," which were to be used by dealers in ordering the "country roll", "straw color", etc.² Yet the Commissioner of Internal Revenue (1890) reported that there was not as much evasion of the payment of the pound tax on oleomargarine as there was of the special tax of dealers, and that the oleomargarine found not branded or marked was only eight samples in a thousand.³

After 1886, nine bills were introduced, but not reported, to amend the act of 1886, but the original package decision made it necessary to legislate more strictly on oleomargarine.⁴ Therefore, the bills introduced after 1890 were

attempts to make that article and other imitation dairy products subject to the laws of the state or territory into which the article was transferred, and to change the tax. The amount of oleomargarine produced had increased so rapidly and the cost of production was so low that dairymen were alarmed - especially after 1900. Armour's made it for five cents a pound and sold it for fifteen cents.⁶

The following figures give the production from passage of the first oleomargarine act, 1886, to the second in 1902.

1887 - 21,513,537 pounds	1895 - 56,958,105
1888 - 34,325,527 *	1896 - 50,835,234
1889 - 35,664,026	1897 - 45,531,293
1890 - 32,324,032	1898 - 57,516,136
1891 - 44,392,409	1899 - 83,139,901
1892 - 48,364,155	1900 - 107,045,028
1893 - 67,224,292	1901 - 104,943,856
1894 - 69,622,246	1902 - 126,316,436 5

II. Legislation, 1890-1906.

During the period, 1890 - 1906, twenty-two bills were introduced, but not considered, for the purpose of making oleomargarine and other imitation dairy products subject to the laws of the states and territory into which the article was transported, and to change the tax. Ten of these were from representatives east of Indiana, seven from west of the Mississippi and four southern.

1. GROUT BILL - passed the House.

A bill was introduced by Grout (Vermont) December 6, 1900, and passed by the House December 7, 1900, but not considered by the Senate.

The arguments against the bill were:

That it was no more fraud to color oleo than any other article, and no one wanted to use white oleo.⁶

That the bill would increase deception by adding an eight cent tax on the pound of colored oleo.⁷

That it was legislating against an article of food which scientists considered healthful.⁸

That it was class legislation and a bad precedent.⁹

That it was in the interest of the Dairy Associations and was opposed by labor organizations, stock raisers, and cotton growers.¹⁰

The arguments for the bill were:

That it would prevent fraud in colored oleo¹¹ and increase revenue.¹²

That the state legislation was inefficient.¹³

That the taxing power could be used for other purposes than revenue.¹⁴

That it was requested by the farmers, dairymen and retail butter dealers to save the butter industry.¹⁵

Wadsworth (New York) introduced a substitute bill for oleomargarine to be made in one and two pound packages with the name and government stamp around it. The opposition favored the substitute but it was rejected and the Grout bill was passed, 197-92, 64 not voting.

2. OLEOMARGARINE ACT OF 1902.

Henry (Connecticut) introduced a House bill January 15, 1902, "to make oleomargarine and other imitation dairy products subject to the laws of the state or territory into which they were transported and to change the tax on oleomargarine", which was reported with amendments, considered and approved May 9, 1902.

The arguments in opposition to the bill were:

That it was class legislation; it would create a butter monopoly and throttle a legitimate industry.¹⁶

That it was urged by the National Dairy Union to drive oleomargarine out of business. (The President of this Union said if a 10 cent tax was not enough, they would increase it.)¹⁷

That it was not right to legislate a wholesome food out of business; and oleo is the poor man's food.¹⁸

That it was not understood by the people who signed the cards sent out by the National Dairy Union.¹⁹

That it would lower the price of stock cattle if the oil was not used.²⁰

That it was opposed by labor organizations.²¹

That it was unconstitutional and was government favoritism.²²

That it was a bad precedent.²³

That there was the same right to color one article as another.²⁴

The arguments in support of the bill were:-

That it would crush the fraud in colored oleomargar-

ine, not the industry.²⁵

That the state laws were inadequate.²⁶

That it was necessary to protect the dairy industry which was the most important branch of agriculture.²⁷

That it would benefit so many and injure so few, for there were 70,000,000 consumers and but 30 manufacturers.²⁸

That it was demanded by the National Grange, by the majority of the people and the agricultural papers.²⁹

That it would protect the poor from being cheated.³⁰

That its principles had been upheld by the supreme court.³¹

In the course of the debate, Robb (Missouri) said that all other classes had received consideration by legislation except the farmer. He was the "forgotten man."

Five important amendments were added to the bill; (1) to allow the states to make oleomargarine "in any manner consistent with the laws of the state "if it was sold within the state). (Scott of Kansas)

(2) Any person who colored oleomargarine to sell, or furnish for the consumption of others except his family and guests without compensation was considered a manufacturer and subject to the provisions of the act. (Tanney, Minnesota)

(3) That the Secretary of Agriculture should provide for inspection of Process and Renovated butter factories and require the product to be labeled. (Allen, Kentucky).

(4) To make imitation butter subject to the laws of the state or territory into which it was transported. (Henry, Connecticut).

(5) That process butter was defined. (by committee)

Wadsworth (New York) introduced a substitute requiring oleomargarine to be made in stamped packages of one-half pounds each and retain the two cent tax. The substitute was rejected and the bill was passed by the House, February 12, 1902.

Bill in the Senate.

The House bill was considered in the Senate from March 24 to April 3.

The arguments in opposition to the bill were:-

That it taxed one industry out of existence for another.³²

v That it was unconstitutional, unjust and wrong in principle.³³

That it would lead to the use of taxing power for suppression and punishment.³⁴

That it tended to encourage fraud by the ten cent tax.³⁵

That it provided for unnecessary revenue.³⁶

That it taxed a wholesome food which was needed for the poor and would increase the price of butter.³⁷

That it was in the interest of the Dairy Association which had determined to destroy the oleomargarine industry.³⁸

In support of the bill, the arguments were:-

That it would prevent fraud in colored oleomargarine.³⁹

That the law of 1886 was inadequate since the original package case was upheld.⁴⁰

That it was necessary legislation because the state laws had been unable to keep down the counterfeit.⁴¹

That it was necessary that the nation might protect its farmers.⁴²

That it was constitutional because the supreme court upheld prohibition of colored oleomargarine in the Plumley and Schollenberger cases.⁴³

That it was a revenue bill, and, therefore, necessary - since war taxes had been removed.⁴⁴

The important amendments added in the Senate were to (1) omit "guests" and add "table" so as to read, "any one selling oleomargarine for the use of others except his family table . . . shall be held a manufacturer . . ." (Foraker).

(2) The license tax was reduced to \$200 for the manufacturer and \$6 for retailer of white oleomargarine. (Harris, Kansas)

(3) Colored butter not construed as artificial coloration.

Henry (Connecticut) in the House, said the bill was little affected by the Senate amendments.

The minority in the Senate presented a substitute (similar to Wadsworth's in the House) but it was rejected and the bill was passed by the Senate, April 4, 39 - 31, 18 not voting. The House concurred with the Senate amendments, except the one on coloration of butter, and the Senate agreed to the action of the House. The President approved the bill May 9, 1902.

3. Provisions of the Act of 1902.

The act of 1902 made the following changes in the regulation of imitation butter:

It became subject to the laws of the state, territory or District of Columbia, into which it was transported for use, consumption, sale or storage.

The tax was to be ten cents a pound for colored oleomargarine and one-fourth of a cent a pound if not artificially colored. The same tax, one-fourth of a cent, was assessed on process or renovated butter, which was to be marked as such, and to be regulated by rules made by the Secretary of Agriculture.

Manufacturers and wholesale dealers were to keep books and make returns in relation to the records to the Commissioner of Internal Revenue. The manufacturer was required to give a five hundred dollar bond; the wholesale dealer was subject to a fine of fifty to five hundred dollars, or one to six months imprisonment for violation of this clause.⁴⁵

III. Oleomargarine Cases in United States and Federal Courts.

1. United States v Eaton - 144 U. S. 677 (1892)

The indictment against Eaton of Massachusetts was that he had not kept the books on oleomargarine, as to amount disposed of, to whom, etc., which was required by the act of 1886, of all wholesale dealers in oleomargarine, and he had failed to make a monthly report to the collector of revenue.

Justice Blatchford reviewed the oleomargarine law and

gave the opinion of the court that the act requiring the records to be kept imposed no penalty on the manufacturer for neglect to keep such books or render such returns. "If Congress had intended to make it an offense for wholesale dealers in oleomargarine to omit to keep books . . . it would have done so distinctly." . . . "It is necessary that a sufficient statutory authority should exist for declaring an act or omission a criminal offense and the statutory authority in the present case was not sufficient."⁴⁶

2. Case of Plumley v Massachusetts - 1894.

Plumley was an agent for oleomargarine in Massachusetts, a state which prohibited the manufacture and sale of all oleomargarine colored to imitate butter. The question was whether the Massachusetts law was in conflict with the constitution of the United States in regulating interstate commerce. Harlan, in presenting the opinion of the court, held that the act of 1886 did not give authority to those who paid the oleomargarine tax to manufacture or sell the article in any state "which lawfully forbade such manufacture or sale, or to disregard any regulations which a state may lawfully prescribe in reference to it; and that act is not intended to be a regulation of commerce among the states." So the law of Massachusetts was not in conflict with the commerce clause of the United States constitution.

"If there be any subject over which it would seem states ought to have plenary control, and the power to legislate in

respect to which it ought not to be supposed was intended to be surrendered to the general government, it is the protection of the people against fraud and deception in the sale of food products. Such legislation may, indeed, indirectly or incidentally affect trade in such products transported from one state to another. But that circumstance does not show that laws of the character alluded to are inconsistent with the power of congress to regulate commerce among the states."

"It was never intended to cut states off from legislating on all subjects relating to health, life, and safety of citizens relating to health, life, and safety of citizens, tho legislation might directly affect the commerce of the country." (39 U.S., 99, Sherlock V Alling).

"We are of the opinion that it is within the power of a state to exclude from its markets any compound manufactured in another state, which has been artificially colored or adulterated so as to cause it to look like an article of food in general use, and the sale of which may, by reason of such adulteration or coloration, cheat the general public into purchasing that which they did not intend to buy. The constitution does not secure to any one the privilege of defrauding the public. . . ."

"The judiciary of the United States should not strike down a legislative enactment of a state, if it has direct connection with the social order, health, or morals of the

people, unless it plainly violates the national constitution.⁴⁷"

3. In re Kollock Petitioner - 1897.

Kollock was indicted in the Supreme Court of District of Columbia for violating the act of 1886 by carrying on the business of retail dealer in oleomargarine without having paid the special tax. On January 14, 1896, he sold one-half pound of oleomargarine as butter, and not marked according to the act of 1886. Kollock filed a petition alleging he was deprived of liberty unlawfully and ^{the} law was unconstitutional in giving power to the Commissioner of Internal Revenue or Secretary of the Treasury.

Justice Fuller quoted from U. S. v Eaton (114 U.S. 677) "The statutory authority in the present case is insufficient. Congress would have stated so distinctly if it wished to make it an offense to fail to keep books."

The court held that the primary object of that act was raising revenue. "Protection to purchasers in respect of getting the real and not a spurious article cannot be held to be the primary object in either instance, and the identification of the dealer, substance, quantity, etc., by marking and branding must be regarded as a means to effectuate the objects of the act in respect to revenue."

The court was of the opinion that leaving the matter of designating marks, brands, and stamps to the Commissioner with the approval of the Secretary involved no unconstitutional delegation of powers.⁴⁸

4. Schollengerger V Penn. - 1897.

Paul V Penn.

Paul V Penn.

The three cases were the result of violation of the Pennsylvania statute prohibiting the sale of oleomargarine.

Schollenberger, a Pennsylvania citizen, was an agent in Philadelphia for the Oakdale Manufacturing Company of Providence, Rhode Island, which manufactured oleomargarine in compliance with the Federal Act of 1886. The oleomargarine was sold in the original package to J. Anderson, who retailed it as oleomargarine.

Justice Peckham, in rendering the opinion of the United States Supreme Court, held that a state had a right to determine whether oleomargarine, a newly invented article of food, was wholesome, and belonged to the articles of commerce.

By the Act of 1886, Congress recognized oleomargarine as a subject of taxation and its manufacture as lawful.

*In (133 U.S. 316) it was held that the inspection law relating to articles of food was not rightful exercise of the police power of the state if . . . it wholly prevented the introduction of the sound article from other states."

By the Wilson Act of 1890, liquors became subject to the laws of the state or territory. The importer had the right to sell and thru agents. So, having that right, the sale became valid.

The act of Pennsylvania was invalid, as a state "cannot for the purpose of preventing the introduction of an impure or adulterated article, absolutely prohibit the introduction of that which is pure and wholesome."⁴⁹

5. Wilkins V. United States.

Wilkins, knowingly, willfully, and unlawfully removed the brands from sixty pounds of oleomargarine in Philadelphia.

The court decided, that the fact that the act of Congress creating an offense, as removing stamps or marks, "delegated to an administrative department of government the duty of designating such stamps . . . , and making rules governing their use, did not render their removal . . . any the less a statutory offense." Regulations made by the executive department have the force of law or if made by the authority of Congress.⁵⁰

6. U. S. V. Dougherty - 1900.

The defendant, Dougherty of Pennsylvania, was charged with selling oleomargarine in packages which were not new, suitable wooden or paper. The term "suitable" was considered indefinite and served no purpose in the trial. But the counts charging him with failure to mark the packages according to the regulations of the commissioner were good.⁵¹

7. Dougherty V U. S. - 1901

Farraher V U. S.

Lavin V U. S.

The charge was similar to that in U. S. v Dougherty. The questions were (1) whether the section 6, of the 1886 act, on marking, branding packages was not merely police regulation and as such, unconstitutional, (2) whether the indictments sufficiently charge any offense punishable under that section.

The Court held that the requirements of marking, etc., were "a means to effect the object of the act in raising revenue, and so regarded it clearly within the constitutional power of Congress.", and the counts were considered an offense punishable under the act.

The penal clause applied to all kinds of dealers.⁵²

8. McCray v United States, - 1904.

McCray was sued for a violation of the act of Congress in knowingly purchasing for resale colored oleomargarine with internal revenue stamps at the rate of one-fourth cents a pound and the law required ten cents a pound.

The Plaintiff claimed that the color came from butter, and that the act taxing oleomargarine ten cents a pound was unconstitutional because; (1) it destroyed the oleomargarine manufacture, (2) it gave an executive officer the power to determine what constituted artificial coloration, and (3) deprived one of his property without due process of law.

In the opinion of the Court, Justice White quoted from Marshall, "The Judicial Department cannot prescribe to the Legislative Department limitations upon its acknowledged

powers . . . Responsibility of the legislative is not to the Courts, but to the people."

On the question of the tax being so high as to be prohibitive, the Court held that Judiciary had no authority to prevent Congress from exerting the taxing power even though the Judiciary considered the tax unwise or oppressive, nor could it inquire into the motive of the tax which was within the power of Congress.

So the manufacture of artificially colored oleomargarine may be prohibited without violation of fundamental rights.

The Acts of 1886 and 1902 are not unconstitutional, nor an interference with the powers reserved to the states, nor can the Judiciary declare it void because it is too high, nor because it amounts to destruction of the manufacture of oleomargarine, nor because it discriminates against oleomargarine in favor of butter."⁵³

CHAPTER XII

MEAT - 1890 - 1906

I. Animal Diseases.

The subject of meat, from 1890 - 1906, was related to that of meat inspection and the packing houses rather than to that of Animal Diseases of the preceding period. But animal diseases were not eradicated, and there were outbreaks at different times, though not so disastrous as in the seventies and eighties.

The Secretary of Agriculture officially announced, September 26, 1892, that there was no pleuro pneumonia in the United States.¹ The disease which replaced it as the serious problem in the animal industry was Bovine Tuberculosis, which was wide spread and more dangerous to human life than pleuro pneumonia. The Bureau of Animal Industry made investigations and studied the disease more carefully after 1893.² In the reports of inspection of animals for slaughter, more cattle and hogs were condemned because of tuberculosis than from any other disease. Trichina was found in the swine examined, 3-1/20% in 1893, 2-2/5% in 1894 and 1-1/2% in 1900.³

The foot and mouth disease was introduced into Chelsea, Massachusetts, in 1902; the first time in eighteen years that the disease had been found in New England. The executive department and states cooperated, and prevented the moving of cattle across Rhode Island, Connecticut, Vermont and Massachusetts. In 1903, there were 4712 cases of the disease, and 4461 of the animals were slaughtered and 70% of the value paid to

the owners.⁴

Texas Fever, which had not been considered a contagious disease before 1890, caused alarm for the cattle industry from 1892 to 1906, and especially from 1902 to 1906, when the quarantine was enforced against it and the need of local inspection was urged. An appropriation of \$82,500 was made, in 1906, to help the Secretary of Agriculture in the work with the local authorities. Men were sent to investigate the areas infected, and advised the owners to move the cattle about to starve the ticks. The work was well organized in Alabama, Arkansas, California, Georgia, Kentucky, Missouri, North Carolina, Oklahoma, Tennessee, Texas, and Virginia.⁵

2. American Animals and Meat in Europe.

In Europe, it was said that diseases, which were not likely to injure the health of the consumer, were not a reason for condemning carcasses, therefore animals with pleuropneumonia, foot and mouth disease, and Texas Fever were not condemned.⁶ However, Germany, acting on the reported discovery of Texas Fever in a cargo of American cattle (1894), revived the prohibition on the importation of live stock and fresh meat from the United States.⁷ Denmark, Belgium and France prohibited American cattle the same year, fearing Texas fever.⁸

American cattle and fresh meat trade with France was decreasing in 1903, because of the rigid sanitary measures prescribed by France for imported cattle and meat products,⁹

yet the American consul at Lyons reported the following year that American meats had revolutionized the dietary habits of the French people. They could afford meats once or twice a day, instead of on special occasions.¹⁰

Germany, 1902, made a strict meat inspection law and "prohibited importation of meat in hermetically sealed boxes, and sausages, chopped meats, dog meat, horse, mule and salipeds or meats treated with boracic acid and its salts, formaldehyde, hydroxides, carbonates of alkalides, sulphuric acid and its salts, hypo sulphurous salts, salicylic acid and salts, chloride and coloring" (unless for coloring material).

Fresh meats were to be in whole carcasses, the halves packed together, with heart, longs, kidneys and pleuro connected.¹¹

The law met with opposition in Germany, because it was for the benefit of the agrarians and not for sanitation, and other countries were adopting similar measures against German products.¹² When Germany attempted to produce canned meat equal to that from the United States, they found it too costly, due to the lack of the indispensable cheap beef. The Vorrische Zeitung reported, "It was a great mistake in our economic policy to prevent the importation of American and Australian canned meats. Sanitary objections do not exist, and our agriculturalists derive no advantage from the prohibition; but on the other hand the laborer is deprived of a cheap and nutritious food product."¹³

3. Legislation on Animal Diseases.

Four bills were introduced, but not considered, 1891-97, to amend the act for establishing the Bureau of Animal Industry and suppression of diseases. A fifth bill was introduced into the House by Wadsworth (New York), 1902, from the Committee on Agriculture, to more effectively suppress and prevent the spread of contagious and infectious diseases of live stock. This bill was considered, passed, and approved February 3, 1903.

The purpose of the bill was two-fold; to transfer the power conferred on the Secretary of the Treasury by the Act of 1884 to the Secretary of Agriculture, and to provide for disposing of hay, forage, etc., from infected regions to prevent disease. The transfer of power should have been made when the Department of Agriculture became an Executive Department, but was lost sight of. The Secretary of Agriculture had exercised the power without its being questioned until a Texas cattle case came up, in which a man disregarded the quarantine rules.

There was but little discussion on the bill. Williams (Mississippi) and Gaines (Tennessee) opposed it because they said it nullified states rights and disregarded the constitution. It was passed by the House, December 16, 1902 and by the Senate, January 27, 1903, with an amendment adding \$100 to \$1000 fine or one year imprisonment for violation. The House concurred and the President approved the bill Feb-
x 107

II. THIS COMPILATION SHOWS THE WORK DONE IN ANIMAL AND
MEAT INSPECTION FROM 1896 - 1906.

Year	No. of Es- tablishments	No. of Cities	No. of Animals Inspected at Slaughter	Meat Micro- scopically Inspected
1896	102	26	23,122,376	21,497,221
1897	128	33	26,533,276	42,570,572
1898	135	35	31,053,171	120,110,356
1899	139	42	34,071,575	108,858,149
1900	149	46	34,619,188	55,809,626
1901	157	52	36,916,936	35,942,407
1902	155	50	38,829,439	33,681,229
1903	156	50	37,183,307	19,108,341
1904	152	51	39,504,114	9,020,621
1905	151	52	40,139,114	14,721,935
1906	163	58	42,901,284	26,566,409

	Ante Mortem	
	No. Inspected	No. Rejected
		At Abattoirs In Stockyards
<u>1896</u>		
Cattle	7,529,526	22,356
Sheep	6,318,284	13,225
Calves	314,846	2,837
Hogs	21,754,826	50,891
<u>1897</u>		
Cattle	8,250,025	195
Sheep	8,044,355	757
Calves	448,983	56
Hogs	25,566,744	12858
<u>1898</u>		
Cattle	9,229,237	104
Sheep	10,028,287	741
Calves	468,199	67
Hogs	36,610,675	9,675
<u>1899</u>		
Cattle	8,943,404	180
Sheep	9,538,384	476
Calves	449,263	41
Hogs	34,238,893	4,942
<u>1900</u>		
<u>1901</u>		
Cattle	10,280,198	318
Sheep	11,233,859	890
Calves	666,476	1,635
Hogs	34,186,786	5,812
<u>1902</u>		
Cattle	9,796,450	340
Sheep	12,556,792	1,180
Calves	839,227	1,259
Hogs	35,964,530	3,579
<u>1903</u>		
Cattle	11,988,760	771
Sheep	14,654,249	1,873
Calves	1,041,138	646
Hogs	31,546,222	3,038
<u>1904</u>		
Cattle	12,599,831	757
Sheep	14,633,129	1,230
Calves	1,143,962	500
Hogs	36,236,461	3,807
<u>1905</u>		
<u>1906</u>		
Cattle	13,507,847	1,875
Sheep	15,293,981	921
Calves	1,688,746	460
Hogs	38,419,977	5,864

Post Mortem			
	No. Inspected	Carcasses Condemned	
		Total	Parts
<u>1896</u>			
Cattle	3,995,461	8,757	6,798
Sheep	4,633,342	4,375	242
Calves	257,836	1,037	33
Hogs	14,278,219	46,139	33,930
<u>1897</u>			
Cattle	4,253,850	10,343	10,290
Sheep	5,213,894	4,738	1,213
Calves	273,911	549	42
Hogs	16,839,034	54,491	37,750
<u>1898</u>			
Cattle	4,433,181	10,018	12,591
Sheep	5,501,675	3,567	287
Calves	245,155	344	52
Hogs	20,936,840	77,579	35,250
<u>1899</u>			
Cattle	4,861,994	10,238	8,973
Sheep	6,125,095	5,474	309
Calves	315,969	236	32
Hogs	23,428,996	45,846	21,032
<u>1900</u>			
<u>1901</u>			
Cattle	5,244,158	12,282	8,701
Sheep	6,646,561	4,449	91
Calves	414,580	535	24
Hogs	24,720,482	54,634	10,973
<u>1902</u>			
Cattle	5,589,691	14,283	3,414
Sheep	7,443,953	5,810	71
Calves	556,551	570	26
Hogs	25,311,781	40,292	13,934
<u>1903</u>			
Cattle	6,165,890	14,605	3,090
Sheep	8,598,175	15,233	106
Calves	670,173	1,629	76
Hogs	21,827,047	46,994	61,208
<u>1904</u>			
Cattle	6,383,080	16,145	5,307
Sheep	8,269,133	8,414	341
Calves	767,927	2,129	114
Hogs	24,170,230	62,487	126,840
<u>1905</u>			
<u>1906</u>			
Cattle	6,925,526	20,439	4,016
Sheep	8,223,630	5,807	123
Calves	1,102,775	4,851	89
Hogs	26,649,953	127,856	121,931

ruary 2, 1903.¹⁴

I. Meat Inspection.

Meat inspection in the United States is divided in two periods: (1) from 1865, when the railroad companies and the stock yard managers in Chicago combined for building the Union Stock Yards, to 1890, when the meat inspection act was passed, and (2) from 1890 to 1906, when the inspection law was amended. In the first period, the inspection was largely a measure to insure American meat for foreign markets which had prohibited live animals and meat on the grounds of animal diseases. The acts of 1890 and 1891 were deficient in meeting the situation, even though the Bureau of Animal Industry spent the most of its appropriations for meat inspection. However, it was not until 1905-1906 that conditions came before the public and more careful inspection and regulation was demanded.

Dr. Salmon, who had been Chief of the Bureau of Animal Industry for twenty-one years, resigned, and Melvin was appointed to the position, December, 1905. Melvin had heard complaint of the Chicago packing houses and planned for an investigation at once, but illness prevented his carrying out the plan. So he issued clean-up orders, though without authority, February 8, 1906, and the investigation was not made until March. He ordered cleanliness in the establishments (1) by whitewashing the walls, clearing the trucks, and keeping the clothing sanitary, and (2) by washing all

implements in a bichlorid of mercury solution and preventing trucks used for tubercular carcasses from being used for any other purpose. Further orders were issued, on April 9, to the inspectors to see that rules were rigidly enforced, and that meat was to be raised from the floor and covered with wire netting.

The new chief explained the limitations of the laws as (1) insufficient provisions for funds to carry on the work of inspection, (2) no provision or authority for marking meat unfit for food, (3) no remedy to require a proprietor to destroy such meat unless to withdraw inspection, (4) no authority for following up meat after inspected, or of condemning meats which afterwards became unwholesome or unclean, and if this had been allowed, there were no funds provided for the work, and (5) no authority to control the sanitation of the establishments or prevent adulteration or use of chemicals and preservatives.

Inspection was practically confined to ante-mortem inspection of animals and inspection of carcasses immediately after slaughter. The unsatisfactory conditions at Chicago related to canned meats, preservatives, methods of packing, and sanitation, "matters over which the Bureau had no control.*16

III. Reports on the Chicago Meat Industry.

The conditions of the Chicago meat industry were brought before the public first through Sinclair's novel, the Jungle, and later by magazines and government investigation.

1. Upton Sinclair's Jungle was printed in the Appeal to Reason and later published in February, 1906. "It became the best selling book in America and Great Britain and its Colonies, and was translated into seventeen languages."¹⁷ Sinclair said he dramatized and interpreted only what he saw and heard from doctors, newspapers, real estate agents, and the workmen. The pastor of the Armour Church said the novel fell far short of the reality.¹⁸

Sinclair went to Packingtown for the purpose of studying the life of the wage earners of the beef trust to write a story for the Appeal to Reason, but he became so interested in the conditions of the meat industry that he determined to make them known to the public. He spent two years studying the meat industry - part of the time as a workman in Packingtown. Hence he could well present the unsanitary conditions of the slaughter houses, the inefficient inspection of both animals and meat, the devices used to evade the law, besides the crowded, filthy quarters where the workmen lived and the diseases prevalent among them. The facts were so startling that it was said a hundred letters a day were sent to President Roosevelt about it.

Sinclair found it very difficult to get the Jungle published. Doubleday, Page and Company finally consented, after hearing the report of their attorney, McKee, whom they sent out to make an investigation at Chicago.¹⁹

Later, May 1906, Sinclair published an article entitled

"The Condemned Meat Industry" in Everybody's Magazine, after a similar experience with the publishers. He came to the conclusion that "American newspapers as a whole represent private interests and not public interests. Some exceptions are made - to get circulation they must pretend to care about the public." "The Condemned Meat Industry" was published at the time the public was waiting anxiously for news of the government investigation because the meat issue was before Congress²⁰.

He said that a Lithuanian, who had worked twenty-six years for Armour's, told him that condemned meat, when put into tanks for fertilizer, was taken out at the bottom and used for sausage. Thomas Doran, who had worked ten years for the same firm, said he had directions for evading the law. For example, he was to cut off the head of the lumpy jaw animal in killing it, to remove tubercles when skinning the tubercular animal, and to cut the gangrene flesh and sell the rest. As much as forty pounds had been cut from one beef. Doran made an affidavit to these facts for the New York Journal, March 4, 1899, but was bribed by Armour's to deny it in the issue for March 6.

The article related how Dr. Jaques, head of the City Inspection Board of Chicago, had ordered his inspectors to inject kerosene into condemned meat with bicycle pumps. As a result the city inspection was soon considered unnecessary and Jaques was relieved of the duties of inspector. Sinclair cited the Lancet in reporting the conditions in Chicago to be unspeakable from the investigation made by Adolph

Smith, the world's greatest authority in packing houses. The meat inspection law, he said, was written by the packers so the condemned meat industry could not be prevented. There were 411 government inspectors in 1904, and they inspected 104,203,753 carcasses - which would be 105 animals per hour.²¹

2. Lancet Report.

While Sinclair was at the packing houses gathering material for the Jungle, he met Adolph Smith, the Special Sanitary Commissioner for the Lancet, the English Medical Magazine. Smith had been sent to America in 1904 to report on conditions here and to visit the St. Louis Exposition. The report of his investigations at the Chicago stock yards and packing houses was published by the Lancet in December, 1904, and January 1905.

He had studied meat packing all over Europe and said he was "not favorably impressed with the sanitary regulations in force for the slaughter of animals at the largest meat packing establishment in the world. The principles of sanitation were ignored from the first to the last. No one would buy meat from Chicago if he could get it at about the same price from Brussels, Berlin, or Paris."²¹ From three to four million cattle were slaughtered annually in "mills" and "factories", not in abattoirs or slaughter houses. The inspectors who represented the United States government, were shown no consideration. They had to work in foul and abominable places.²² The rooms where the meat was taken care of were dark, dirty and unventilated. He heard many stories of the

condemned meat industry, but he could hardly believe they were true. Tuberculosis was common among the workmen.

He held that the main object at Chicago was profit, and there was "more readiness (in the United States) to legislate for protection of property than of public health,"²³ If there was any sense of dignity, the United States would sweep those places out of existence. It was hard to say what the conditions would have been without European restrictions on American meat, and Washington investigation. "The conditions of the great industry -- were not a local or a national, but an international question."²⁴

"The great trouble in America is want of centralization and uniformity . . . Today we need, especially in matters relating to health, not only national but even international laws. But in their legislative evolution, the United States do not yet seem to have attained a full appreciation of the necessity of national laws."²⁵

3. Jacques.

W. K. Jaques, a Chicago physician, who was head of the city meat inspection,^{said inspection} was very inefficient at Chicago. When he was appointed to that position he was told he need not give up his regular medical practice and the city inspection also carried on their regular work. He said some of the city inspectors worked with the packers in ordering healthy cattle quarantined and then bidding them in at half price after they were killed.

Jaques tried to prevent the condemned meat industry by ordering kerosene injected into the meat, but his inspectors had difficulty in carrying out the order, because the workmen would hurry the diseased meat away before it could be done. Soon after this method was adopted, it was reported that government inspection was so good that the city inspection could be discontinued, and that was done for two years (1903-5). He said the inspectors were shown many favors by the wealthy packers and this had its influence on the inspection. Then, too, the number of inspectors was inadequate. There were 170 government employees, 50 of whom were capable of inspecting meat and each had to inspect from 1600 to 2200 cattle daily.²⁶

4. Thomas McKee.

Thomas McKee, an Attorney for Doubleday, Page and Company, was sent out to investigate conditions in Chicago before the company would publish the Jungle.²⁷

He reported that ante-mortem inspection was largely a process of condemning animals and bidding them in to be slaughtered for meat. The animals which passed post-mortem inspection became the property of the packers so they used every device to prevent their being a loss to the firm. After the meat was placed in the cooling room it was not seen again by the inspector. "It may be cut up, weeks later, and stored in dark, rat-infested rooms, or soaked for weeks in liquid pickle, trundled through murky passages, pitchforked by laborers from vessels to vehicle and back again, and fi-

nally cooked in open vats, in rooms low, hot, greasy, and, except for the flare of torches, dark as a mine." The canned product then received the government label and by it "the government is permitting its name to be used merely as a selling device for packers."

McKee spoke to a manager about the uncleanness of the departments, but was told there were others just as bad. When he asked who decided whether cholera hogs were unfit for lard, the manager said it was left largely to his discretion as the rules were not definite. There was so much deception practiced in the meat industry that McKee felt some distinction should be made between diseased and good meat, as in Germany, to let the people know what they were buying.²⁸

5. Caroline Hedger.

Caroline Hedger, a physician, who had worked three years among the people of Packingtown, said the meat problem was a serious one because of the health of the workmen. Tuberculosis was common because of the crowded, filthy houses and the unsanitary conditions of the packing houses. She considered the meat dangerous to the public health, especially that which did not have to be cooked before being used.²⁹

6. Report of the Secretary of Agriculture.

A month after the Chief of the Bureau of Animal Industry had sent clean-up orders to the Chicago packing houses, a committee was appointed to inspect the abattoirs. They made a detailed report after ten days inspection, March 12 -

22, 1906. They reported 31 ante-mortem inspectors and 40 post-mortem. These men inspected 20,899,195 animals and rejected 45,272 in 1905. Of that number, 11,581,765 were slaughtered and 58,637 rejected.

The report explained the process of inspecting, condemning, and marking meat. It discussed the inspection maintained by the City of Chicago to prevent the slaughter of animals with actinomycosis (lumpy jaw). For that work, the city employed four men at the stockyards and two for the meat markets and commission houses. The committee and mayor met, March 19, to discuss the work, that there might be greater cooperation in the meat inspection.

The committee visited the 22 abattoirs and reported on the conditions by floors, and by rooms. They found some in quite good condition, some fair, and others bad. Number Fifteen was one of the better ones. In the most of the rooms, the walls were whitewashed and the posts painted about five feet from the floor. The coolers were in fair condition. In the curing rooms, troughs were placed over the pipes to catch the drip. The cellars were sanitary. Two of the closets were very unsanitary but the others were sanitary. The lighting was generally good, but the windows in some rooms were dirty. A bucket of Bichloride solution was provided for disinfecting the knives.

In Number One, the light and ventilation were good in the killing room, but the cooking and canning rooms were dark and

steamy. The pickle cellars had wet floors and imperfect drainage. The storage cellars and closets were filthy. The tripe and pigs feet rooms were filthy and the meat carelessly handled. The trimming room had water dripping from the ceiling, and the women who did the work stood in boxes of sawdust four feet from refrigerator pipes, while the temperature of the room was but 36°F.

Number Ninety-six was indescribably filthy with dirt two inches deep on the floor and "more unsanitary conditions for an abattoir could not be found."

The committee explained the limitations of the existing law and made the following recommendations; (1) that the Federal inspectors should be empowered to mark as unfit for food the carcasses of animals found, on post mortem inspection, to be diseased and unfit for food, (2) that carriers should be prohibited from transporting, from a state, territory or the District of Columbia, any carcasses not inspected and marked in accordance with the provisions of the act of 1891, (3) that the Secretary of Agriculture should be given power to regulate the sanitary conditions of the establishments, (4) that sufficient natural light should be provided for inspection and the employees of the Bureau of Animal Industry should have access at all times to the portions of the establishment where inspection is carried on; (5) that the number of federal employees should be increased and (6) that microscopic inspection should be paid for by the establishment.

The reports of the Lancet, Jungle, and World's Work show conditions as they were, in 1904-1905, before any special attempt had been made for improvement. The Lancet and Jungle present the conditions fourteen months before the government committee was sent. As previously stated, the clean-up orders were issued by the Chief of the Bureau of Animal Industry in February, 1906, and from the committee's report, it was evident that the orders were enforced in some abattoirs. For example; buckets of bichloride solution were provided for disinfecting the knives used; the pork was placed on racks and protected by burlap about fifteen inches above the floor along the aisles; and some of the walls had been whitewashed.³⁰

A supplemental report was included, comparing statements made in these earlier reports with the committee's investigation. The committee tried to show the earlier reports were overdrawn or that some of their statements were false.

7. Roosevelt's Committee.

President Roosevelt became interested in the conditions at Chicago and sent a committee of two, Neill and Reynolds, to investigate and report. It was said that the President was aroused by the Jungle. Upton Sinclair said the news of this investigation soon reached Chicago and as a result the committee was watched.

The report of the committee was sent to Congress June 4. It stated that the conditions of the yards were slimy and dead animals from the cars were lying on the platforms.

The buildings had wet slimy floors. The lighting and ventilation were poor, and often no windows. The sanitary conveniences were in awful condition, and some of the new buildings had many of the defects of the old ones. In the treatment of meat, there was an absence of cleanliness. Meat scraps were shoveled from the floors on which the workmen expectorated, but when attention was called to this the reply was made that the meat would be cooked. The sausage was made by workmen with dirty hands, and often no water near for washing.

The ante-mortem inspection was of little value, but the post mortem and microscopic inspections were more carefully done. The number of inspectors was inadequate and the law did not provide for inspection after the meat went to the cooling room.³¹

With the report, President Roosevelt sent a message, saying the conditions were "revolting" and in the interests of health and decency should be radically changed."³²

He urged legislation for inspection from "the hoof to the can" and that the cost of inspection should be provided for by a fee on each animal slaughtered, else the purpose of the law would be defeated by limiting the appropriations.³³ But the bill, as passed, provided that the cost was to be paid by the government.

IV. Legislation for Inspection, 1890-1906.

1. Bills and Appropriation Amendments.

Six bills were introduced, but not considered, from

1890 - 1906, to amend the Inspection Act, but the defects were partly met by amendments to the Agriculture Appropriation Bills - (1) in 1895, by authorizing the Secretary of Agriculture to make necessary rules and regulations to prevent the transportation to and from a state, territory or the District of Columbia, of carcasses or parts of carcasses which had been inspected and condemned by the provisions of the law, and a violation of that provision would be punishable by a \$1,000 fine or one year imprisonment or both.

(2) A provision in the appropriation act for 1901 provided further "that the Secretary of Agriculture may in his discretion waive the requirement of a certificate with beef and other products which are exported to countries that do not require such inspection."

(3) The deficiency act of February 27, 1906, contained the item that \$63,000 was appropriated "to meet the demands for more meat inspection and for microscopic inspection of pork."³⁴

2. Agitation in 1906.

a. Resolution and bills.

The agitation for legislation started in Congress by three House resolutions, introduced (1) by Williams (Mississippi), touching on the conditions in meat packing, (2) by Sulzer (New York), requesting information of the President on the meat investigation, and (3) by Fulkerson (Missouri),

requesting the Secretary of Agriculture to make public the information concerning meat products. These were referred to the Committee on Agriculture, but no further action was reported. However, the reports of the investigation were presented to Congress later. Beveridge (Indiana) introduced a bill into the Senate, May 21, 1906, and Crumpacker (Indiana) a similar bill, May 31, relating to meat inspection, but neither were reported by the committee.

(b) Meat Inspection Rider on Agriculture Appropriation Bill, 1906.

Beveridge (Indiana) in the Senate, May 25, introduced an amendment providing for meat inspection as a rider on the agriculture appropriation bill, and it was agreed to without debate. Wadsworth (New York) in the House, presented a substitute from the Committee on Agriculture. There was no argument in opposition to the substitute as a whole, but the clause in controversy was the one relating to the payment for inspection. The House substitute provided that the cost of inspection should be paid by the government; the Senate rider had provided that it be paid by the packers on the animals inspected. Those opposing the House method said the packers should pay it because they were the ones benefited, and they had been responsible for the conditions. Those supporting it held that the government should pay for sanitary legislation and inspection, because the packers would put the burden on the stock growers, and the inspectors would be more

responsible to the government if they were paid by the government than by the packers. (Davis (Minnesota) intended to introduce an amendment providing that the packers pay the cost, but the Parliamentary rules prevented an amendment, so the appropriation bill was passed by the House with the Wadsworth substitute, June 19.

On June 20, the amended bill was reported in the Senate by Proctor (Vermont) who said the House had "inserted teeth in the bill". Lodge (Massachusetts), representing the Administration view point, explained that if the cost of inspection was left to annual appropriations it would soon be economized until the law would be ineffective. Lorimer (Illinois) said that much of the talk about Chicago was false. If they would spend fifteen or twenty thousand dollars on ventilation, soap, and towels, the evil would be remedied.

It was said that many machine made telegrams were received urging that the government, not the growers, pay the cost of inspection. It was supposed that they came from the packers.

After the third conference, the House agreed to all the Senate amendments on the appropriation bill - except the meat inspection rider. In the fourth conference, June 29, the Senate agreed to the House substitute on meat inspection, and the President approved the bill, June 30, 1906.³⁵

Roosevelt said the great beef dealers fought these measures bitterly and sought in many ways to deprive them

of their effectiveness, but in vain. "The whole country was aroused and Congress acted in obedience to an overwhelming popular demand."³⁶

2. Provisions of Act of 1906.

The act of 1906 provided for examination and inspection of all animals (cattle, sheep, swine, and goats) before they should be allowed to enter into any slaughtering, packing, meat canning, rendering, or similar establishment in which they were to be slaughtered for interstate or foreign commerce; and all animals showing symptoms of disease were "to be set apart and slaughtered separately from all other cattle, sheep, swine, or goats, and when so slaughtered the carcasses . . . shall be subject to a careful examination and inspection", as provided by the rules and regulations made by the Secretary of Agriculture.

Post-mortem examination and inspection shall be made of the carcasses and parts of all animals to be prepared for food, and those "found sound, healthful, wholesome, and fit for human food shall be marked, stamped, tagged, or labeled, as 'Inspected and Passed'." and "all found unsound, unwholesome, and unfit for food are to be marked, stamped, etc., as 'Inspected and Condemned," and "shall be destroyed for food purposes by the establishment in the presence of an inspector," and an inspector may be removed from the establishment if he fails to destroy condemned meat. If a carcass or parts of carcasses are reinspected and found unfit for food, they

are to be destroyed for food purposes.

Inspectors were to be appointed to inspect the canning, salting, packing, rendering and similar establishment, by day or night. He is to use the same marks of inspection, "Inspected and Passed" for all products found to be wholesome and fit for food, and which contained no dyes, preservatives, chemicals, or ingredients which render them unsound or unhealthful. If the products are rendered unfit for food by these, they are to be marked "Inspected and Condemned" and be destroyed for food purposes.

This did not apply to meats for export if prepared according to specifications of the purchaser, if not conflicting with the laws of that country. The receptacles containing meat products were to be labeled as "Inspected and Passed" and to be sold only under true or trade name.

The Secretary of Agriculture was to appoint experts or competent inspectors and make the rules and regulations for inspection of all places where meat and meat products were to be prepared for interstate and foreign commerce. If sanitary conditions were such as to make the meat or meat food products unfit for food, they were not to be marked "Inspected and Passed". Inspection was to be made at night if slaughtering and preparing continued during the night.

All cattle and meats for export were to be inspected and the official certificate was to be presented by the owner before clearance was to be given the vessel.

The products of establishments violating the law were not to be sold or transported. The penalty for violation of any part of the act was a fine of \$10,000 or two years imprisonment, or both.

The Secretary of Agriculture was to appoint the inspectors and make all rules and regulations by which the work was to be carried on, and no person, firm or corporation, was to pay or offer money to any government inspector or employee with the intent to influence these officials in performing their duty. The penalty for violation of this act, for either party, was a fine of \$5,000 to \$10,000 and from one to three years imprisonment.

The sum of \$3,000,000 was appropriated for the expenses of the inspection of cattle, sheep, swine, and goats and the meat products for foreign and interstate commerce and for all expenses necessary to carry out the provisions of the act.³⁷

PURE FOOD LEGISLATION

I. Movement for Pure Food Legislation.

The movement for a general food law progressed in the period from 1890 - 1906, and especially after 1898, when the attention of the public was focused on the necessity of a Pure Food law because of the army meat investigation following the Spanish American war.¹ The journalists and public men urged a national law and national standards because the state laws differed so much as to food products and standards that manufacturers had to employ lawyers to advise them in the labeling of food products.² A general law would raise the standard of purity of foods and increase the demand for American foods in foreign markets.³ The special legislation of the earlier period had done much in that direction, but as Wiley said, in 1896, "Special legislation directed against a single article of food can never secure the approbation of the community to the degree which would be accorded by general legislation against food adulteration. All these cases should be covered by a general law, easily enforced, and which would command the undivided support of the public."⁴

The efforts of Congress, from 1890 - 1900, to make a Pure Food Law failed, largely because of the absence of general public demand for it.⁵ It was said that there was less interest than on the subject of feed for cattle and of fertilizer, for which penal laws had been made.⁶ Wiley

said the general indifference showed a desire "to be cheated, fooled, bamboozled, cajoled, deceived, pettifogged . . ."⁷

McCumber (North Dakota) said "The nation cannot prescribe a dietary course for each individual. But what it can do and what it morally should do is this; it should protest a man against all fraud and imposition, so that acting upon his own intelligence, supplemented by the advice of specialists, he may procure those articles of food, beverage, and drugs necessary for his own physical condition, and more important, he should avoid that which is deleterious." The government required a man to pay good money, therefore it should protect him against spurious foods and medicines.⁸ The ethical side of the question received more attention by 1900, even from the pulpit,⁹ Public men were beginning to feel that it was a reflection on the United States that there was no Pure Food law. Senator Mason (Illinois) remarked that "The United States was the only country that does not protect the consumer of food products, and that the amount of adulteration carried on in this country is simply appalling."¹⁰

1. Adulteration.

It was said that "Modern conditions of life made substitutions necessary",¹¹ and the result was that "all foods were either adulterated or misbranded."¹² The Secretary of the Agriculture, in 1905, estimated the adulteration of food in the United States at \$1,175,000,000 yearly, or 15% of all commerce.¹³

A comparison of conditions in the United States and in England, where the law had been made in 1875, showed that adulteration in England was insignificant in comparison. As an example, 13% of 398 suspected articles in England were adulterated, and 45% of the food articles indiscriminately gathered in the state of Connecticut.¹⁴

The following statements were made concerning the fraud and adulteration in food articles; (1) That more Vermont maple sugar was made in Davenport, Iowa, from cheap yellow sugar and vegetable extracts than could be produced from all the maple trees in Vermont; (2) that "Pure Olive Oil" was made from cotton seed oil of the south; (3) That fifteen year old whiskey could be made in fifteen minutes; (4) that 70% of the beer was made without malt; (5) that milk and butter were adulterated with freezem (formaldehyde)¹⁵; that strawberry jelly was adulterated with coloring, flavoring, and timothy seed; (7) that French sardines came from the shoals of Maine, and Russian sturgeon caviare from Delaware; (8) that coffee beans were made of flour and molasses by machines; (9) that spices were not spices; that cocoa was cheaper in New York than in Venezuela, because it was 70% adulterants.¹⁶ The Independent said of adulteration in the United States - "One could tell such a big lie without making false statements about it."¹⁷

2. Preservatives.

a. History of Preservatives.

The subject of preservatives became a vital question after 1900, though their use had been questioned by many,

including scientists, from the eighties. The chemical preservatives used made it possible to can foods without cooking at high temperatures, which disintegrated the food and made it less attractive.¹⁸ It was often pointed out that the preservatives were not well mixed with the food which made them more dangerous to the consumer, and careless workmen could remedy their errors in preserving foods and in cleaning of utensils by adding preservatives.¹⁹

Chemists held that the preservatives used to preserve and color foods were tasteless unless in large quantities, and were probably not dangerous if taken occasionally in small amounts. But the officers in the army said they tasted and smelled the boric and salicylic acid in the beef, and the odor was so strong as to be sickening at a distance of several feet.²⁰

The American nation has been said to be one of dyspeptics, and the preservatives used could well explain that condition, to say nothing of the adulterants that have been mentioned. These preservatives which came into common use were salicylic and boric acid, formaldehyde (freezem), sodium sulphite (freezine), benzoic, and ammonium fluorid.²¹ Of these, the salicylic acid was used in canning fruits and vegetables after 1880, but the tendency was to prohibit it. The boric acid was used largely in preparing meats. In chopped meats, 1 to 4 ounces was used to 100 pounds of meat, and 5 to 15 grains were considered an adult dose.²² Mc-

Gumber said 90% of the local meat markets aused such chemical preservatives. When Germany protested, in 1900, against American meat with borax as unwholesome, the packers claimed it was to hurt the trade, but the United States later saw the German contention was right.²³ Pyroligenous acid was used in 1820 to put over meat to save the task of smoking, and in 1900 it was sold as "Extract of Smoke" or "Liquid Smoke" at seventy-five cents a quart, when the pyroligenous acid was but thirty cents a gallon.

Formaldehyde was used to preserve milk. The fluorids were used in beer to the extent of .23 grains of ammonium fluorid to the quart, which was seven times the minimum dose.²⁴ The coal tar flavoring extracts were found to be dangerous in soda water, ice cream, and confectionary.²⁵ Foreign countries prohibited the use of many of the preservatives or required foods containing them to be labeled. Germany made regulations that the vessels used in preparing foods were not to contain over a certain percent of lead. Yet some of the chemists held that boric and salicylic acid were dangerous, and others that they were not. Two English doctors, Macalister and Bradenham, in 1903, made an investigation of salicylic acid, as a food preservative, and reported no bodily injury, or grounds for objections to its use. One of them took five grains a day of pure salicylic acid for a month and gave a smaller dose to children without injury. Kalbe took from 15 - 23 grains a day for nine months without ap-

parent injury.²⁶

(b) Government Experiment.

Congress, in 1902, appropriated a fund to carry on the work of food investigation in the Bureau of Chemistry, which was used in the study of food preservatives. Dr. Wiley, Chief of the Bureau, carried on the work with the aid of experts and a cook secured from the civil service commission, and a kitchen and dining room were provided in the Bureau of Chemistry. Twelve young men, popularly called the "Poison Squad" volunteered to eat the prescribed food and follow the rules necessary to work out the experiment for a period of six months. They were to use no stimulants, but could smoke, and were not to discuss symptoms or think of the test if possible.²⁷ The men were divided in groups and were given pure food for a certain period, then boric acid in some article of food for a time, and so on. When they realized which article of food contained the boric acid, it became distasteful to them so capsules had to be used instead.

From the data collected, the conclusions were reached that borax or boric acid in certain quantities should be restricted to cases absolutely necessary and where other methods of preservation were not applicable. When taken in small quantities, $7\frac{1}{2}$ grains ($\frac{1}{2}$ grammes) a day, no immediately notable effects were shown, but in larger amounts there was a feeling of fulness, nausea, headache, and sharp pains in the stomach. Four or five grammes a day resulted in a loss of appetite and in ability to work, and one-half gramme was too much for a man regularly.²⁸

(c) Agitation for Legislation.

Wiley urged legislation to establish uniform standards and to require the law to be so executed that preservatives would be prohibited or the foods so treated should be sold under label with the true name.

The National Pure Food Congress, organized in 1898 in Washington, District of Columbia, laid much stress on the subject of preservatives. It prepared a uniform pure food bill and endorsed the Brosius food bill which had been introduced, but which had received no attention because of the war revenue bill.²⁹ In 1903, a meeting was held in St. Paul, Minnesota, of representatives of the Bureau of Chemistry, Inspection Division of the Bureau of Animal Industry, State Officials, and manufacturers. In the discussion on preservatives, the manufacturers showed they were trying to solve the problem.³⁰

The following year, 1904, the International Pure Food Congress met at St. Louis. Representatives of foreign governments, State Dairy and Food Departments, United States Department of Agriculture, Boards of Health, and Food manufacturers were present and every food was discussed. They held that there were good methods of preservation, as cold storage, sterilization, wood smoke, salt, sugar, and vinegar, and that any antiseptic used to preserve food should be stated on the label.³¹

PURE FOOD LEGISLATION, 1890 - 1906.

I. Bills and Petitions.

Fifty-six bills were introduced from 1890 - 1906, but not considered, to prevent the adulteration and misbranding of food and to regulate the interstate traffic therein. The men who introduced more than one bill were Brosius (Pennsylvania) 8, Faulkner (West Virginia) 4, Hepburn (Iowa) 3, McCumber (North Dakota) 3, Mason (Illinois) 3, Hansbrough (North Dakota) 2, Sherman (Ohio) 2, Depew (New York) 2, Lorimer (Illinois) 2 and Varnèr (Illinois) 2.

During that period 418 petitions were presented asking for this legislation. The statement often made that the public was not demanding a law is proven by the petitions. Only 79 were presented before 1900. There were two organizations which were more effective than petitions - the National Association of State Dairy and Food Departments and the National Pure Food and Drug Congress, organized in 1898. They met quite regularly and exerted much influence in the pure food movement. The National Pure Food Congress drafted laws for state and national legislation and did all it could to secure their passage.

2. Adulteration and Misbranding Bill, 1891. Passed by Senate.

Paddock (Nebraska) introduced a bill into the Senate, December 1891, for preventing adulteration and misbranding

of foods and drugs, which was reported with amendments, considered and passed by the Senate March 8, 1892, but not considered in the House.

In opening the discussion on the bill, Paddock explained the aims to be (1) to deal with articles which were subjects of interstate commerce, (2) to make it impossible for the public to be deceived by misbranded foods, (3) to prevent the sale of poisonous, impure, and harmful articles. He felt the way was clear for this kind of legislation, because of the meat acts of the year before, and many were urging it by petitions. The important points in the discussion were, the procuring of samples, appointing of unlimited number of chemists for the Food Division under the Bureau, and exercising authority by the federal government for this legislation.

Coke (Texas), Bates (Tennessee) and Vest (Missouri) opposed the bill on the "States Rights" argument. Chief Justice Marshall was quoted - "Congress may control state laws so far as it may be necessary to control them for regulations of commerce," so the doctrine could be accepted that Congress could make provisions for regulation of commerce among states in adulterated foods. The bill was supported largely by Paddock and Platt. In urging the passage of the bill for the health of the public and honest business, the fact was emphasized that "The United States was the only civilized country which did not have a law covering the

whole field of food adulteration."³²

3. Hansbrough Bill, 1902.

Hansbrough (North Dakota) introduced a bill in the Senate, January 29, 1902, to prevent the adulteration, misbranding, and imitation of foods, beverages, condiments, and drugs in the District of Columbia and Territories and regulate the traffic therein. The bill was reported and discussed by McCumber but passed over for other bills without general debate.

McCumber (North Dakota) explained the bill, and said the necessity for such legislation was because of the failure of state laws, due to the dual form of government and the interstate commerce clause of the constitution. He cited a number of cases as, Schollenberger v. Pennsylvania, Plumley v. Massachusetts, Bowman v. Northwestern, and others, whose "decisions fairly well defined the limits of federal and state authority over articles of interstate commerce and the line of demarcation between federal interstate commerce authority and the state police power." So the right to regulate interstate commerce is exclusively federal and the failure of Congress to exercise exclusive power in a case means the subject should be free from restrictions by a state. The police power of the state extends to the prohibition of the sale of imported articles, even in original packages, if their sale may cheat or defraud. But it is for Congress, not a state, to determine whether an article is a proper subject of commerce.

The subject of adulteration and fraud had become a moral question; men had to give honest dollars but received bogus goods in return. Such conditions demoralized trade. For forty years, legislation had been for the manufacturer and now that the farmers asked a fair deal Congress should respond.

The manufacturers were asking for national legislation on pure food because of the divergent laws of the state, and as evidence, McCumber quoted from more than thirty manufacturing companies.

No conclusion was reached on the bill because other legislation was taken up on six out of the eight days on which it was to be considered.³³

4. Hepburn Bill - 1902.

Hepburn (Iowa) presented a Pure Food Bill in the House December 10, 1902, which was reported, considered and passed by the House, December 19, 1902, but the Senate refused to take it up. Tompkins (Ohio) explained the bill in the House, December 18, and said the Pure Food Congress, which represented all classes, had urged the legislation, as had other societies over the country. He added that the bill provided that the Secretary of Agriculture appoint a special bureau of chemists for food inspection of such products as are subjects of interstate commerce, and prescribe standards of excellence in food and purity of drugs. The terms, "Food" and "drug" were defined, and all such articles when adulterated were to be so labeled. The purpose of the bill was to

aid the laws of the states in insuring pure food to the people, and there was no intention to usurp the police powers of the states.

The arguments in opposition to the bill were:

(a) That there was no necessity for the bill, the states could carry out its provisions if they would.³⁴

(b) That it compelled a man to commit a crime that the government might convict him in the refusal to sell samples.³⁵

(c) That it was unconstitutional - in compelling a man to sell samples.³⁶

(d) That it provided for inspectors who would merely serve party purposes.³⁷

(e) That it would hit industries which sold food containing injurious ingredients tho they were labeled, and it was better for people not to know what they were eating.³⁸

The arguments in support were:

(a) That the bill would benefit the consumer and protect the manufacturer.³⁹

(b) That it was necessary, because state laws were ineffective as proved by the oleomargarine laws before the federal law was made.⁴⁰

(c) That it was demanded, because American products were opposed in German markets due to the boric acid used.⁴¹

(d) That it was within the power of Congress to prohibit objectionable commerce, if international or interstate (from laws and cases cited.)⁴²

(e) That it would be favored, after it was made, and retail dealers were sending requests to push the Hepburn bill.⁴³

Hepburn, in closing the debate, said no subject had attracted the attention of Congress more in the past five years or been so unanimously petitioned as this measure, largely because of the diversified legislation of the states. Of the thirty-six states which had food laws, no two were alike. He said the bill was prepared by a committee appointed by the Pure Food Congress, and it was not as drastic as he would have made it.

The bill was amended by excluding "District of Columbia" because it had a law on pure food. Mann (Illinois) made a motion to recommit the bill to the Committee to report a bill introduced by himself at the request of the Retail Grocer's Association, but the motion was lost, and the Hepburn bill was passed by the House, December 19, 1902, 72 - 21.

The House Bill was reported in the Senate on February 5, 1903, by McCumber, who explained the amendments made by the committee - to strike out the sections giving the Secretary of Agriculture the authority of establishing food standards and providing for a bureau of chemistry to aid in that work. So there was left only the sections on adulterations and misbranding. The committee felt^{they} were not in the stage of science that it would be safe for the Department of Agriculture to determine what are food standards and to compel every manufacturer to measure up to the standard

so fixed.

The Senate refused to take up the bill for discussion, though McCumber tried to bring it before that body on three different days. He said a pure food bill had been on the calendar since April 2, 1903 and had been put off for other bills. He felt they should give one hour to it at least - and decide by a vote whether they approved or not. But the Senate, by a vote of 28 - 32, 28 not voting, refused to debate on the bill.

5. Branding or Labeling Act, 1902.

A. Legislative History of the Act.

Sherman (New York) introduced a bill January, 1902, in the House, to prevent false branding or marking of food and dairy products in the states and territories, which was reported, considered and passed by both houses, and approved, July 1, 1902.

The bill was brought before the House by Sherman, of the Committee on Interstate and Foreign Commerce, on March 14, and immediate action was asked. The reason for the bill was the misbranding of articles, especially poor cheese, as "No. 6 New York" or "Wisconsin" or some other good brand, and counterfeit syrups were branded with false names. Richardson (Tennessee) questioned the disposing of the bill in an hour, but was told there was no expenditure in the bill, so the bill was passed by the House without debate, March 14.

McCumber (North Dakota) presented the House bill in the Senate and asked unanimous consent for it. An amendment was added by the Committee on Agriculture omitting "Indian Tribes" and inserting "no person or corporation shall introduce into a state or territory of the United States, or the District of Columbia, from another state . . . any dairy or food product which shall be falsely labeled or branded . . ." and one by Lodge (Massachusetts) adding "knowingly" so as to read, "if any knowingly violate the act . . .". The bill was passed by the Senate without further debate on May 16. The House concurred in the Senate amendments after the conference report, and the President approved the bill July 1, 1902.⁴⁴

(b) Provisions of the act.

The act provided,

"That no person or persons, or company or corporation, shall introduce into any state or territory of the United States or the District of Columbia, from any other state or territory . . ., or sell in the District of Columbia, or in any territory any dairy or food product which shall be falsely labeled or branded as to the state or territory in which they are made, produced, or grown, or cause or procure the same to be done by others.

That if any person or persons violate the provisions of this act in person or through another, he shall be guilty of a misdemeanor and shall be punished by a fine of not less than five hundred nor more than two thousand dollars;

and that the jurisdiction for the prosecution of said misdemeanor shall be within the district of the United States Court in which it is committed."⁴⁵

6. Hepburn Bill Passed by House, 1904.

Hepburn (Iowa) introduced a bill in the House, December 8, 1903, "to prevent adulteration, misbranding, and imitation of foods, beverages, condiments and drugs in the District of Columbia and territories and to regulate the interstate traffic in the same", which was reported with amendments, debated and passed by the House January 20, 1904.

Mann (Illinois) in explaining the bill said it was the same bill as one passed before by the House.

The arguments in opposition to the bill were:

(a) That it was not necessary - as food regulation should be left to the states, and "those best governed were least governed".⁴⁶

(b) That it usurped the state police power, and Congress had already made enough laws on food.⁴⁷

(c) That it gave too much power to the Secretary of Agriculture and analysts, in fixing of standards.⁴⁸

(d) That it was to help the "manufacturers to get the best of each other", and much of the talk of need for food legislation was "buncombe".⁴⁹

(e) That it was unconstitutional, in forcing a man to testify against himself in the selling of samples.⁵⁰

The arguments in support were:

(a) That it was necessary because of the failure of state laws to regulate the subject of food, and that it would not interfere with state laws.⁵¹

(b) That it would tend to put the goods sold throughout the country under uniform law.⁵²

(c) That it gave no more power to the Secretary of Agriculture than to Judges of the Courts, and extraordinary power had to be vested in some hands.⁵³

(d) That it was constitutional to require the sale of samples; it was the same principle as a man having to report his property to the assessor.⁵⁴

The bill was passed by the House by a vote of 201-62, January 20, with the amendment giving "the Secretary of Agriculture authority to fix standards for the guidance of officials in the administration of the food law, and for information of the courts, and to determine the wholesomeness of preservatives and other substances which are or may be added to foods, and to aid in reaching just decisions he is authorized to call on the committee of food standards of the Association of Official Agricultural Chemists and any experts deemed necessary." Hepburn explained that the bill was left with the provision permitting meat for export to be treated with Boracic acid, subject to the laws of the country to which meat would be exported, as England preferred it so treated, but Germany prohibited it.

7. Pure Food Act of 1906.

2. Legislative History of the Act of 1906.

Hepburn (Idaho) introduced a bill into the Senate, December 6, 1905 "to prevent the manufacture, sale, or transportation of adulterated, or misbranded, or poisonous, or deleterious foods, drugs, medicines, and liquors, and to regulate the traffic therein," which was reported with amendments, considered, passed, and approved June 30, 1906.

The bill was considered in the Senate from January 10 to February 21. Heyburn explained the bill, which was the same as the food bills on the calendar before, with three clauses added - (1) making the officers of a corporation personally responsible for violations of the act, (2) requiring the three departments, Treasury, Agriculture, and Commerce and Labor, to make rules concerning the samples, and (3) making the distinction between liquors and foods. He said Congress should act for the people -- when they asked for a measure "we cannot ignore that voice," . . . "The people are the government . . . but sometimes Congress . . . conceives the idea that Congressmen govern the people," and this legislation affects the people more than the land question, the river and harbor, or than foreign relations bills.

Money (Mississippi) offered a substitute bill which, he said, the National Live Stock men and Canning Associations approved, and the discussion took into consideration both bills. McCumber (North Dakota) said the substitute was from the manufacturers whose goods were under the ban of the food

laws in the different states and they were seeking to prevent a general pure food law.

The arguments in opposition to the Heyburn bill were:

(A) That it deprived the states of their rights, and they could best take care of their morals and health.⁵⁵

(B) That it seemed unconstitutional in demanding manufacturers to sell samples as evidence against himself.⁵⁶

(C) That it discriminated in favor of one making straight whiskey and against the one making blended.⁵⁷

(d) That it was not definite on adulterations of foods.⁵⁸

(e) That it gave too much power to the Secretary of Agriculture and Bureau of Chemistry, and the Secretary already had too much to do.⁵⁹

(f) That it did not contain standards for food and drugs.⁶⁰

(g) That it should not require the formula on liquor packages, as the word "blended" was sufficient.⁶¹

(h) That it would permit the Secretary of Agriculture to paralyze the trade in foods and drinks which he branded as "fraud" or "adulterated."⁶²

(i) That it would close up state manufactories which make articles that some other states will buy.⁶³

Arguments in support were:

(a) That it would aid in the enforcement of state pure food laws, which had been ineffective alone.⁶⁴

(b) That it would not interfere with any legitimate business.⁶⁵

(c) That it was constitutional - in demanding samples of a party entering interstate commerce, which was under the control of Congress.⁶⁶

(d) That it was within the power of Congress, through the interstate commerce clause, to protect the people (both pocketbooks and lives).⁶⁷

(e) That it is necessary legislation because the moral character of the people is affected by the crime and deceit.⁶⁸

The discussion in the Senate was chiefly on the liquor sections and the power of Secretary of Agriculture and Bureau of Chemistry.

The important amendments added were:

(1) That products for shipment, when preserved by external application, applied in a manner that the preservative is necessarily removed, shall not be included in this act. (by Lodge).

(2) Using the word "mixed" instead of "vatted" on labels for liquor packages (by Foraker).

(3) To show amount, if any, of alcohol or of opium in drugs. (Lodge)

(4) The word "goods" was struck out and "foods, drugs, or liquors" so as to read "nothing in the act to be construed as requiring or compelling proprietors or manufacturers of proprietary foods, drugs, or liquors . . . to disclose their formula." (Foraker)

(5) That the Secretary of Agriculture shall cause notice

to be given to the parties from whom samples were obtained, and after final judgement of the Court public notice shall be given.* (Committee)

Money (Mississippi) offered the substitute which was rejected, and the Heyburn bill was passed by the Senate, February 21, 63 - 4, 22 not voting.

The Senate bill was reported in the House June 21, by Mann (Illinois). The committee had struck out all after the enacting clause and added a substitute, which Mann explained as differing from the Senate bill (1) by including Patent Medicines, (2) requiring accurate weight and size on packages, (3) making it the duty of the Secretary of the Agriculture to fix standards.

The arguments in opposition to the bill were:

(a) That it minimized the police power of the states and magnified the power of the general government.⁶⁹

(b) That it treated foreign states with more decency than American states, in complying with their laws.⁷⁰

(c) That it was not needed, as complaints are not from the states but from business men who want uniformity.⁷¹

(d) That it destroyed states' rights.⁷²

(e) That it should not include weights and measures because they had nothing to do with pure food.⁷³

(f) That it was a bad precedent - people would ask Congress for everything and next it would be uniform divorce laws.⁷⁴

(g) That it was unconstitutional - because the states were supreme in law making.⁷⁵

(h) That it tended to centralization and bureaucracy.⁷⁶

(i) That it did not regulate the manufacture of whisky properly.⁷⁷

Arguments in support were:

(a) That it was necessary to protect the common people from fraud⁷⁸ in adulteration and condemned meat⁷⁹, and to raise the moral standard.⁸⁰

(b) That it did not interfere with states rights.⁸¹

(c) That it did not supplant state legislation and would encourage honesty.⁸²

(d) That it would protect the states against the imposition of canners of other states.⁸³

(e) That it would not interfere with any legitimate industry.⁸⁴

(f) That it was constitutional because a number of cases had decided that Congress had power to regulate every instrument of commerce as well as the articles carried, and a state could not regulate interstate commerce.⁸⁵

(g) That it regulated Patent Medicines.⁸⁶

The sections on Patent medicines, the weight and measure on labels, and labeling of liquors were discussed most thoroughly.

The important amendments added to the bill were:- (1)
The Secretary of Agriculture was to determine and make known

the standards of various articles from time to time. (Mann)
(2) Foods complying with the standard fixed by the Secretary of Agriculture to have on the label "U. S. Standard" but if not as described this would be considered misbranding. (3) Secretary of Trasury to deliver samples of imported goods to the Secretary of Agriculture and owner or consignee to appear before him to give testimony . . . " (Mann). (4) "If in package form, the approximate quantity when put up be not plainly and correctly stated on weight or measure - it would be considered misbranded." (Mann). (5) "All foods and drugs transported into any state or territory or remaining therein for use, composition, or sale or storage, shall upon arrival in such state, or territory - be subject to the laws of that state enacted for its police powers . . . ". (Adamson).

The vote was taken on the substitute as amended and agreed to. The bill was passed by the House June 23, 1906, 241 - 17,-9 "Present", 112 not voting.

The Senate non-concurred with the House amendments and the House asked for a conference. The report of the conference to which both houses agreed was given by Mann (Illinois) June 29, in the House. He said the bill in the main was the House bill. The article on requiring a man to sell samples of food was eliminated, also question of states rights and control of the Federal Government over original packages. The liquor clause was changed so the package must bear the label "Compound", "Imitation" or "Blended" - and all medi-

cines must bear the label of quantity of alcohol, opium, morphine or other habit forming drugs named in the bill.

The President approved the bill June 30, 1906.

Mann said the credit for enacting the Pure Food law was due to Hepburn, Chairman of the Committee on Interstate Commerce. For eight years, he had advocated food legislation, and then for the third time the House had passed the bill under his leadership.⁸⁷

Wiley said of the Act of 1906, the "Food and Drug Act introduces for the first time into this country a national control over interstate and foreign commerce in food and drugs. Importation of foreign drugs is controlled at the port of entry under existing law which was first enacted in 1848." ⁸⁸

2. Provisions of the Act of 1906.

The Pure Food Act of 1906 made it unlawful to manufacture, within a Territory or the District of Columbia, any article of food or drug which was adulterated or misbranded, or to carry on interstate commerce in such articles. An article was not deemed misbranded or adulterated when intended for foreign export if prepared or packed according to the directions of the foreign purchaser when no substance was used in conflict with the laws of the foreign country to which the article was to be exported.

The Secretary of the Treasury, the Secretary of Agriculture, and the Secretary of Commerce and Labor were to

Make the rules and regulations for carrying out the provisions of the act, which included collecting and examining specimens of foods and drugs sold in the District of Columbia or territories, or offered for sale in unbroken packages in any state, or were received from a foreign country, or intended for export. The examination was to be made in the Bureau of Chemistry or under its direction. If an article was found to be adulterated or misbranded, a notice was to be given by the Secretary of Agriculture to the party from whom the specimens were obtained. If it appeared from the hearing that the act had been violated, the Secretary of Agriculture was to send a certificate of the violations and a copy of the results of the analysis to the proper United States attorney. It was the duty of the attorney to begin legal proceedings when the Secretary of Agriculture, or health, or food, or drug officer, or agent of any state, territory or District of Columbia, presented satisfactory evidence of such violation.

The term 'drug' included all medicines and preparations recognized in the United States Pharmacopoeia or National Formulary for internal or external use and any substance or mixture of substances intended to be used for the cure, mitigation, or prevention of diseases of either man or animals. The term 'food' . . . shall include all articles used for food, drink, confectionery, or condiment by man or other animals, whether simple, mixed, or compound.

A drug was deemed adulterated (1) if it differed from

the standard of strength, quality, or purity laid down in the United States Pharmacopoeia or National Formulary - unless it stated the strength, quality, or purity plainly on the bottle, box or container; (2) if its strength or purity was below the standard or quality under which it was sold.

Confectionery was deemed adulterated "if it contained terra alba, barytes, talc, chrome yellow, or other mineral substance or poisonous color or flavor, or other ingredient deleterious or detrimental to health, or any vinous, malt or spirituous liquor or compound or narcotic drug."

Food was deemed adulterated (1) if it contained injurious mixtures affecting the quality or strength, (2) if it was made up wholly or in part by a substitute, (3) if a constituent had been abstracted, (4) if colored, powdered, etc. to conceal damage or inferiority, (5) if it contained any deleterious ingredient except preservatives, which were allowed for preparation for shipment if the directions for their removal were printed on the covering of the package; or (6) if it contained filthy, decomposed or putrid animal or vegetable substances, or products of a diseased animal or of one that had died otherwise than by slaughter.

Misbranding of drugs consisted of selling under a false name, or with false contents, or without stating on the label the quantity or proportion of the narcotics which were listed in the act. Foods were deemed misbranded if (1) an imitation of another article, (2) if sold under a false label, or if

the narcotics used were not stated on the label, (3) if incorrect weight and measure was not plainly stated, or (4) if it bore any false or misleading statement of the substances therein. The act further provided that articles not containing added poisonous or deleterious ingredients are not deemed adulterated or misbranded if the compounds are sold under distinctive names, and the terms "Compound", "Imitation" or "Blend" are stated plainly on the label. Proprietors or manufacturers of proprietary foods are not required to disclose their formulas, if their proprietary foods contain no unwholesome added ingredient, except in so far as the act required freedom from adulteration or misbranding.

No dealer was to be prosecuted if he presented a guaranty from the manufacturer, jobber, wholesaler, or other party residing in the United States, from whom he purchased the article, to the effect that it was not adulterated or misbranded.

Foods, drugs, and liquors that were adulterated or misbranded, and which were articles of interstate commerce, were "liable to be proceeded against in any District Court of the United States within the district where the same is found and seized for confiscation by a process of libel for condemnation." If the goods were condemned, they were to be destroyed or sold, or the court might order their return to the owner. Samples of imported foods and drugs were delivered to the Secretary of Agriculture by the Secretary of the Treas-

ury, and if found adulterated they were to be denied admission.

The term "Territory" included the insular possessions of the United States, and "person" included persons, corporations, companies, societies and associations, so the omission or failure of an officer or agent of a corporation, association, etc., was to be deemed the omission or failure of the corporation, association, etc.

The penalty for the violation of the Interstate Commerce Clause was a fine of \$200 for the first offense, and \$300 or one year imprisonment, or both, for subsequent offense. The act went into effect January 1, 1907.⁸⁹

CHAPTER XIV.

CONCLUSION

The purpose of food and drug legislation was two-fold, (1) to protect the health of the consumer, which is social in character, and (2) to prevent fraud, which is economic. The economic aspect of the subject was uppermost in the beginning and the social aspect was of minor importance. The economic argument was based very largely on protection of foreign commerce and bargaining in foreign markets in the case of cattle, meat, and cheese legislation. In the case of oleomargarine, it was the protection of the northern and western agricultural interests. As time passed, the social argument gained in importance. Various organizations emphasized this phase, especially the Medical and Pharmaceutical Associations, National Pure Food and Drug Congress, National Dairy Association and the Granges. To them much credit is due for creating public sentiment which made pure food legislation possible.

During the period in which the Federal government legislated on special articles of food, complaint was made that the state laws were inefficient and this was emphasized in the debates in Congress. The failure of state legislation was due (1) to the fact that states had no control over interstate commerce, (2) to the lack of uniformity in state standards, (3) to the decision in the original package case, and (4) to the decision in the Schollenberger V. Pennsyl-

vania case. Hence there developed a tendency to expect Congress to remedy conditions. Many bills were introduced relating to various articles, as spices, salmon, lager beer, vinegar, patent medicines, molasses, sugar, syrup, and wine, besides the one which received consideration in Congress. Joseph Cannon, speaking in Philadelphia (1906) on the republic's greatest danger, criticised the tendency to seek protection from the government, and added, ". . . This danger does not come from a desire of the Federal government to grasp power not conferred by the constitution, but rather from the desire of citizens of the respective states to cast upon the Federal government the responsibility and duty they should perform. If the federal government continues to centralize, we will soon find we will have a vast bureaucratic government which will prove inefficient, if not corrupt." Throughout the debates, the opposition presented the states right argument, and often quoted Harlan in the Plumley V. Massachusetts decision, "If there be any subject over which it would seem the states right to have primary control . . . it is the protection of the people against fraud and deception in the sale of food products."

It was said that legislation was hindered by the manufacturers who feared federal standards for food and drug articles. The representatives of the meat, patent medicine, canning, and oleomargarine industries were in Washington to prevent legislation which would interfere with their partic-

ular industries. But McCumber (1906) cited over thirty manufacturers who sent letters asking for a pure food law. Since food regulation was originally a state function, the result was a dual regulation, and standards are fixed by both federal and state governments. Hence the producer is responsible to both.

Food and Drug regulation, from 1848 to 1906, marked a new type of legislation by the federal government, and especially after 1884. The Drug Act (1848) and the Tea Act (1883) were an exercise of the federal power to regulate foreign commerce in adulterated and inferior articles. But by the act of 1884, which regulated live stock and meats and also established the Bureau of Animal Industry, the federal government took the first step in excluding from interstate commerce an article that was not up to the standard. Within two years, the oleomargarine act regulated an article of commerce on the grounds that it was injurious to public health, and that fraud was practiced in its manufacture and sale. After that it was a question of how far the federal government would go in its regulation. By 1890, it had enacted all of the laws for the District of Columbia, including the general pure food laws.

After that period, a more aggressive step was taken -- by the Oleomargarine Act (1902) which made the article subject to the laws of the state into which it was transported, by the Labeling or Branding Act (1902) which prohibited dairy

and food articles, when falsely labeled, from entering or leaving a state or territory, and finally by the Meat Inspection and Pure Food and Drug Acts of 1906.

FOOTNOTES

-0-

CHAPTER I - PURE FOOD AND DRUG PROBLEM

1. Editorial, "Age of Honesty". Dublin Review, Vol. 31 (1851) pp. 589-611. (Hereafter cited as Editorial, Dublin Rev.)
Editorial, "Accum on Adulterations". Blackwood Magazine, Vol. 6 (1820) pp. 543 - 554. (Hereafter cited as Editorial in Blackw.)
2. Accum, F. C. Treatise on Adulteration of Food and Culinary poisons. (Philadelphia, Ab'm Small, 1820) p. 14-15. (Hereafter cited as Accum.)
3. Ibid.
4. Editorial in Blackw. Vol. 6, pp. 543-54.
5. Article on Accum. Dictionary of National Biography. (London, New York, 1885) Vol. 1, p. 57.
6. Editorial in Blackw. Vol. 6, pp. 543-554.
7. Wynter, A. "Adulteration of Food". Ectectic Review. Vol. 35 (1885) pp. 487-505. (Hereafter cited as Wynter)
8. Hassall, A. H. Adulterations Detected. (London, Spottiswoode and Company, 1861) p. 22.
9. Bigelow, W. D. "Development of Legislation for Pure Food". Science. Vol. 7 (1885) pp. 505-13.
10. Hassal. pp. 2-26.
11. Article on "Adulteration", Encyclopedia Britiannica. Eleventh Edition.
12. Hassall. Pp. 11-17.

13. Ibid.
14. Wynter in Eclectic. Vol. 35, pp. 487-505.
15. Hassall. pp. 11-17.
16. Ibid.
17. Accum, pp. 212.
18. Hassall. PP. 11-17.
19. Hassall. pp. 11-17; Editorial in Dublin Review, Vol. 31, pp. 589-611.
20. Hassall. pp. 11-17.
21. Accum. pp. 79-80; Editorial in Blackw. Vol. 6, pp.543-54.
22. Hassall. pp. 691-692.
23. Ibid.
24. Ibid.
25. Editorial in Eclectic. Vol. 35, pp. 487-505
26. Hassall. pp. 691-692.
27. Wynter in Eclectic. Vol. 35, pp. 687-505.
28. Hendrick, Burton. "Eight Years of Pure Food Law". McClure, Vol. 44 (1915) pp. 59-70
29. Wynter in Eclectic. Vol. 35, pp. 487-505.
30. Wynter, A. "Food and its Adulteration". Living Age, Vol. 46 (1855) p. 67. (Hereafter cited as Wynter, Living Age.)
31. Report of Commissioner of Internal Revenue. (1885) p. 195. (Hereafter cited as Rept. of Com. of Int. Rev.)
32. Waller, E. "Danger in Food and Drink". Century, Vol.

- 9 (1886) pp. 303-307.)
33. Von Holst, H. "Adulteration in Germany", Nation, Vol. 26 (1878) p. 129.
 34. Rept. of Com. of Int. Rev. (1885) p. 195.
 35. Ibid., (1889) pp. 194.
 36. Johnson. S. W. "Debate on Adulteration of Food." American Journal of Social Science, Vol. 13 (1881) p.99. (Hereafter cited as Johnson, .J., of Soc. S.C., Vol. 13, p.99.)
 37. Senate Miscellaneous Document, 2 session, 51 Congress. Vol. 3, No. 70. (Hereafter cited as S.M.Doc. Vol.3, No. 70.)
 38. S.M.Doc. Vol. 3, No. 70; Johnson A. J. of Soc.S.C., Vol. 13, p. 99; Unsigned article, "Food and its Adulteration," North American Review. Vol. 94 (1862) pp. 1-4.
 39. Report of Commissioner of Agriculture (1887). (Hereafter cited as Rept. of Com. of Agr.); S.M.Doc. Vol. 3, No. 70; Frankel, Lee F. "Food Adulteration and Pure Food Law," Journal of Franklin Institute. Vol. 143 (1897) p. 241. (Hereafter cited as Frankel.)
 40. House Report, 1 s. 47 C. Vol. 5, No. 634.
 41. Hassall, pp. 11-17.
 42. Hassall, pp. 11-17, Accum, p. 241.
 43. Frankel. Vol. 143, p. 241.
 44. Wynter, Living Age. Vol. 46, p. 67.

45. Mason, H. B. "Urgent Need of Pure Food Legislation." Outlook, Vol. 65 (1900) p. 400. (Hereafter cited as Mason.)
46. Richards, E. "Substitutes and Adulterants." Science, Vol. 15 (1890) p. 86.
Johnson, A. J., of Soc. S.C., Vol. 13, p. 99.
47. Johnson, A. J., of Soc. S.C., Vol. 13, p. 99.
48. Frankel. Vol. 143, p. 241.
49. S. M. doc., Vol. 3, No. 70.
50. Angell, G. T. "Adulteration of Food." A.J. of Soc.S.C. Vol. 13 (1881) p. 123.
51. Rept. of Com. of Int. Rev.(1889) p. 180.
52. Ibid., (1888) p. 209.

- - - - -

CHAPTER II - DRUGS

1. History of Pharmacy in the United States. Proceedings of the American Pharmaceutical Association. Vol. 50 (1902) pp. 101-16. (Hereafter cited as Proc. A. Ph. Assn.)
2. Ibid.
3. New York College of Pharmacy on Adulteration of Drugs. Journal of Pharmacy. Vol. 19 (1847) p. 305; (Hereafter cited as J. of Ph.)
New York College of Pharmacy on Adulteration of Medicines. Hunt's Merchant Magazine, Vol. 18 (1848) p. 442. (Hereafter cited as Hunt.)
4. Editorial. J. of Ph. Vol. 52 (1880) p. 527.
5. Hunt. Vol. 18, p. 442.

6. Ibid.
7. Ibid.
8. House Report, 1 s. 30 C., Vol. 3, No. 664.
9. Ibid.
10. Ibid.
11. Unsigned article, "Adulteration in English Groceries",
Hunt's Merchant Magazine, Vol. 41 (1859) p. 652.
12. Patronillard, M. "False White Ginger." Journal of Pharmacy, Vol. 46 (1874) p. 562-3.
13. Miller, Adolph. "Adulterations." J. of Ph., Vol. 49,
(1874) p. 57.
14. Ibid.
15. Ibid.
16. Editorial. Hunt. Vol. 41 (1859) p. 652.
17. H. Rept. 1 s. 30 C., Vol. 3, No. 664.
18. Congressional Record, 1 session, 30 Congress, April 3 -
June 26, 1848. (Hereafter cited as Cong. Rec. 1 s.
30 C.)
19. 8 Stat. L. 238 (1848)
20. Editorial, "Adulteration of Drugs", Pharmaceutical Journal, Vol. 11 (1851-2) p. 343. (Hereafter cited
as Editorial Pharm. J.)
21. Proc. A. Ph. Assn., Vol. 50, p. 117
22. Constitution. Proc. of A. Ph. Assn., Vol. 6 (1857) p.
162. (Hereafter cited as Const. Proc. of A. Ph.
Assn., Vol. 6, p. 162.)

23. Proc. A. Ph. Assn., Vol. 50, p. 117.
24. Edward's Report. House Executive Document. 2 s. 3 C.,
Vol. 5, No. 43, pp. 1-11. (Hereafter cited as H. Ex.
doc.)
25. Report of the Secretary of Treasury, J. of Ph., Vol. 21
(1849) pp. 153-169. (Hereafter cited as Rept. of Secy.
of Treas.)
26. H. Ex. doc., Vol. 5, No. 43.
27. Ibid.
28. Bailey's M. J. Report. Proc. A. Ph. Assn., Vols. 1 - 4
(1851) p. 26.
29. Ibid., p. 30.
30. Ibid., p. 26.
31. Report on Rejected Drugs. Proc. A. Ph. Assn. (1853)
p. 42.
32. H. ex. doc., Vol. 5, No. 43.
33. Ibid.
34. Editorial. J. of Ph., Vol. 20 (1848) p. 349.
35. Rept. of Secy. of Treas., Vol. 20, p. 153.
36. Editorial. Pharm. J., Vol. 11, p. 343.
37. Const. Proc. A. Ph. Assn., Vol. 6, p. 162.
38. Unsigned, "Drug Adulteration", J. of Ph., Vol. 17,
p. 51.
39. Wells, David. Economic Monographs. (New York., G. P.
Putnam's Sons, 1878) p. 5.

CHAPTER III - TEA.

1. Walsh, J. M. Tea, Its History and Mystery. (Philadelphia, Henry T. Coates and Company, 1892) pp. 9 - 25.
2. Hassall, pp. 65 - 105.
3. Wynter, in Eclectic, Vol. 35, pp. 487-505.
4. Hassall, pp. 65-105.
5. Walsh, pp. 46 - 49.
6. Ibid., p. 135.
7. Ibid.
8. Unsigned article, "Tea in China", Hunt's Merchant Magazine, Vol. 47 (1862) p. 452. (Hereafter cited as Hunt)
9. Wynter. Eclectic., Vol. 35, p. 491. Hunt, Vol. 47, p. 452.
10. Rept. of Com. of Agri., 1871, p. 235.
11. Wynter, Eclectic, Vol. 35, p. 491.
12. Walsh, p. 135.
13. Ibid.
14. Hassall, p. 14.
15. Cons. Rep. 1889. Vol. 30, p. 450.
16. Walsh, p. 247.
17. House Journal, 1 s, 36 C., Feb. 15, 1860.
18. Cong. Rec., 2 s, 47 C., Feb. 3 - 28, 1883.
19. 22 Stat. L. 451 (1883)

CHAPTER IV - ANIMAL DISEASES AND
MEAT INSPECTION.

1. Yearbook of the Department of Agriculture (1905) p. 151.
(Hereafter cited as Yearbook of Dept. of Agr.)
2. Report of the Bureau of Animal Industry (1896) pp. 111-

136. (Hereafter cited as Bur. of A. I.)
2. Yearbook of Dept. of Agr. (1897) p. 240.
 4. Department of Agriculture, Diseases of Animals, (1916)
p. 479. (Hereafter cited as Diseases of Animals.)
 5. Ibid., pp. 485-6.
 6. Ibid., p. 392.
 7. Ibid., p. 382.; Bur. of A.I. (1884) p. 226.
 8. Cong. Rec., 1 s, 45 C.
 9. Diseases of Animals, p. 369.
 10. Ibid., p. 371.
 11. Yearbook of Dept. of Agr. (1906) p. 352.
 12. Richardson, James, Compilation of Messages and Papers of the Presidents, (New York, Bureau of National Literature Incorporated. 1897). 20 Vols. Vol. 10, p. 4578. (1880). (Hereafter cited as Pres. Mess.)
 13. Cong. Rec., 1 s, 59 C., December 12 - 18, 1865.
 14. Ibid., 1 s. 39 C., March 2, 1866.
 15. H. Ex. doc., 2 s, 46 C, Part 1, No. 1, (1879).
 16. Consular Reports (1881) p. 64; (1886) p. 195; (1883) p. 219 and 13-20. (Hereafter cited as Cong. Rept.)
 17. Bur. of A.I. (1884) p. 473.
 18. Article Trichina. Encyclopedia Britannica, Eleventh Edition (1911).
 19. Bur. of A.I. (1884) p. 473.
 20. Pres. Mess. (1880) Vol. 10, p. 4578.
 21. Connelley, W. E., Life of Preston B. Plumb. (Chicago, Brown, Howell and Company 1913).

22. Pres. Mess. (1833) Vol. 22, P. 4771.
23. Cong. Rec. 1 s, 47 C., May 10, 1882.
24. Ibid., 1 s. 49 C., Jan. 9, 1884.
25. Ibid., 1 s. 48 C. (H.) Dec. 11, 1883 -- May 29, 1884.
26. Massall (Kentucky), Feb. 23.
26. Ibid., Broadhead (Missouri) Feb. 23.
27. Ibid., Lanham (Texas) Feb. 6.
28. Ibid., Eaton (Connecticut) and Reagan (Texas), Feb. 6;
Potter (New York) Feb. 23.
29. Ibid., Stewart (Texas), Feb. 23.
30. Ibid., Potter, Feb. 6; Halsell, Feb. 23.
31. Ibid., Peters (New York), Feb. 6; Jones (Wisconsin), Feb.
23; Weller (Iowa), Feb. 23; Dunham (Illinois), Feb.
24; Springer (Illinois), and Wise (Virginia), Feb. 23.
32. Ibid., Wilson (Iowa), Feb. 5.
33. Ibid., Middrow (Mississippi) and Lawrence (Pennsylvan-
is), Feb. 6; Wilson, Feb. 5.
34. Ibid., Nutting (New York), Belfold (Colorado), and Hep-
burn (Iowa), Feb. 6.
35. Ibid., Wilson, Feb. 5.
36. Ibid.
37. Ibid., Coke (Texas) and McPherson (New Jersey) Apr. 23;
Morgan (Alabama) Apr. 24 and 28.
38. Ibid., Coke, Apr. 23.
39. Ibid., Jones (Florida), Apr. 25; Morgan, Apr. 28.
40. Ibid., Vest (Missouri) and Jones, Apr. 25.

41. Ibid., Morgan, Apr. 28.
42. Ibid., Bayard (Deleware) Apr. 28.
43. Ibid., Morgan, Apr. 28.
44. Ibid., Coke, Apr. 23.
45. Ibid., Williams (Alabama) Apr. 23.
46. Ibid., Plumb (Kansas) Apr. 24, 28; Williams (Kentucky)
Apr. 29.
47. Ibid., Williams, Apr. 28.
48. Ibid., Williams, Apr. 25; Plumb, Apr. 29.
49. 23 Stat. L. 31 (1884)
50. Yearbook of Dept. of Agr. (1889) p. 36;
Pres. Mess, Vol. 11, p. 4979 (1883)
51. Yearbook of Dept. of Agr. (1889) p. 49.
52. Cong. Rec. 2 s. 49 C. Dec. 20, 1868 to Feb. 28, 1887.
53. Ibid., McMillan (Tennessee), McAdoo (New Jersey), Jan.
27.
54. Ibid., Funston (Kansas, Jan. 27.
55. 24 Stat. L. 103. (1886)
56. Pres. Mess., Vol. 12, p. 5383. (1888)
57. Cong. Rec. 1 s, 50 D (S) Feb. 22, 1888.
58. Pres. Mess., Vol. 11, p. 4758 (1883).
59. Ibid., Vol. 13, p. 5540 (1890) and p. 5383 (1888).
60. Cong. Rec., 1 s, 51 C. (S), May 1, 1890.
61. Ibid., 1 s. 51 C., June 11, 1890.
62. Ibid., Feb. 11 - Aug. 30, 1891.
63. Ibid., H. Rep. 1 s., 51 C., Vol. 6, Part 2, No. 1792,p.2.

64. Cortissog, Royal. Life of Whitelaw Reid. (New York, Charles Scribner's Sons, 1921) 2 vols. Vol. 1, Chaps. 7 - 8 (Hereafter cited as Whitelaw Reid.)
65. 26 Stat. L. 414 (1890)
66. Cong. Rec., 2 s. 51 C., June 24, 1890 - Mr. 3, 1891.
67. 26 Stat. L. 1909 (1891)
68. Pres. Mess., Vol. 12, p. 5554 (1890)
69. Bur. of A. T. (1889-1891) pp. 22-23; Pres. Mess, Vol. 13, p. 5763 (1892).
70. Stat. L. (1884 - 1891)
71. Pres. Mess., Vol. 13, #641 (1890)
72. Whitelaw Reid. p. 148-9.

CHAPTER V - OLEOMARGARINE

1. Report of Commissioner of Internal Revenue, 1887, p. 151.
2. Article on Oleomargarine - Encyclopedia Britannica, Eleventh Edition;
H. R., 1 s. 47 C., Vol. 5, No. 1529.
3. Ibid.; Yearbook of Dept. of Agr., 1895, p. 445.
4. H.M.C., 1 s. 48 C., Vol. 16, No. 31.
5. H. M., 1 s. 49 C., Vol. 10, No. 71, p. 1;
H. R., 1 s. 49 C., Vol. 10.
6. Cong. Rec., 1 s. 49 C., Apr. 28 - Aug. 5, 1886.
House Debate - Breckenridge (Kentucky) and Cabell (Virginia), May 25.
7. Ibid., Hammond (Georgia) May 24; Tillman (South Carolina) May 27.

8. Ibid., McAdoo (New Jersey) May 28.
9. Ibid., Dunham (Illinois) May 25.
10. Ibid., Curtis, May 25.
11. Ibid., Breckenridge, May 25.
12. Ibid., Scott (Pennsylvania) May 24; Townshend (Illinois) May 28; Bayne (Pennsylvania) May 25.
13. Ibid., Henderson (Iowa) May 25.
14. Ibid., Morgan (Mississippi); Millard (New York, and Weaver (Iowa) May 25.
15. Ibid., Farwell (Illinois) May 25.
16. Ibid., Hopkins (Illinois) May 25; Frederick (Iowa) May 25.
17. Ibid., Henderson, May 25.
18. Ibid., Henderson and Millard, May 25.
19. Cong. Rec., 1 s. 40 C., June 3.
20. Senate Debate - Call (Florida) July 20; Vest (Missouri) July 19; Vance (North Carolina) July 17.
21. Ibid., Coke (Texas) July 17.
22. Ibid., Vance, July 17; Coke, July 28.
23. Ibid., Harris (Tennessee) July 19.
24. Ibid., George (Mississippi) and Ingalls (Kansas) July 20.
25. Ibid., Coke, July 17; George, July 20.
26. Ibid., Miller (New York) and Gray (Delaware) July 15; Brown (Georgia) July 20.
27. Ibid., Riddleberger (Virginia) July 19; Beck (Kentucky) July 17.
28. Ibid., Falmer (Michigan) and Miller, July 17.

29. Ibid.
30. Ibid., Palmer, Miller (July 17) and Hawley (Connecticut) July 20.
31. Ibid., Willer and Everts (New York) July 20.
32. Ibid., Miller, July 17.
33. Cong. Rec., 1 s. 49 C., July 23.
34. H. ex. doc., 1 s. 49 C., Vol. 35, No. 368.
35. 24 Stat. L. 209.
36. S. ex. doc., 2 s. 49 C., Vol. 1, No. 6.
37. Rep. Com. of Int. Rev., 1878 - 1891.

- - - - -

CHAPTER VI - LARD

1. Cons. Rep. (1839) Vol. 27, p. 113.
2. Ibid., 257.
3. Cong. Rec., 1 s. 51 C., Sweney (Iowa) Aug. 21, 1890.
4. Senate Miscellaneous Documents, 1 s. 51 C., Vol. 1.
(Hereafter cited as S.M.C.)
5. Cong. Rec., 1 s. 51 C. (H), July 28 - Aug. 28, 1890.
6. Ibid., Houk (Tennessee) Aug. 21, Rogers (Arkansas) Aug. 23, Catching (Mississippi) Aug. 21, Herbert (Alabama) Aug. 23.
7. Ibid., Stewart (Texas) Aug. 21, McAdoo (New Jersey) Aug. 23, Kelley (Kansas) Aug. 23, Catching (Mississippi) Aug. 21.
8. Ibid., Morse (Massachusetts) Aug. 23, Mason (Illinois) Aug. 21.
9. Ibid., McAdoo, Aug. 23.

10. Ibid., Mason, Aug. 21, Frank (Missouri) Aug. 21.
11. Ibid., Sweney (Iowa) Aug. 21; Lacey (Iowa) Aug. 21, Brosius (Pennsylvania) Aug. 20, O'Donnell (Michigan) Aug. 23, Hill (Illinois) Aug. 21.
12. Ibid., Sweney, Aug. 21, Allen (Kentucky) Aug. 21.
13. Ibid., Sweney, Aug. 21, Brosius, Aug. 20, Dummell (Minnesota) Aug. 21.
14. Ibid., Lacey, Aug. 21.
15. Ibid., O'Donnell, Aug. 23; Butterworth (Ohio) Aug. 23, Lacey, Aug. 23; Brosius, Aug. 20, Hill, Aug. 21.
16. Ibid., Hill, Aug. 21.

CHAPTER VII - DISTRICT OF COLUMBIA

1. Cong. Rec., 1 s. 44 C.; 1 s. 47 C. (1876-1882)
2. Ibid., 2 s. 42 C. (1871) - 1 s. 56 C (1900)
3. Ibid., 2 s. 45 C. (1879)
4. Ibid., 1 s. 55 C. (1898)
5. Ibid., 1 s. 50 C. (1888)
6. 25 Stat. L. 549 (1883)
7. Cong. Rec., 2 s. 54 C (1897)

PART II.

CHAPTER IX - CHEESE

1. Yearbook of Dept. of Agr. (1895) p. 467.
2. Ibid., p. 29.
3. Ibid., p. 467 and p. 29.
4. Cong. Rec. 1 s. 54 C., May 26, 1896.
5. Ibid., (H) McMillin (Tennessee), Evans (Kentucky),
Clardy (Kentucky), Underwood (Alabama) and Drumm (Pen-
sylvania) Apr. 10.
6. Ibid., Otey (Virginia) and Tracy (Missouri), Apr. 10.
7. Ibid., Otey Apr. 10.
8. Ibid., Evans, Apr. 10.
9. Ibid., Bzrtlett (New York) Apr. 11.
10. Ibid., Evans and Shaw (North Carolina), Apr. 10;
Talbert (South Carolina), Apr. 11.
11. Ibid., Cook (Wisconsin) Apr. 9; Tanney (Minnesota) and
Sauerheing (Wisconsin) Apr. 10.
12. Ibid., Barney (Wisconsin) Apr. 10.
13. Ibid., Cook, Apr. 9; Grosveror (Ohio) and Tauney, Sauer-
heing, and Dolliver (Iowa) Apr. 10.
14. Ibid., Ray (New York) and Dolliver, Apr. 10; Sherman
(Ohio) Apr. 11.
15. Ibid., (s) Vest (Missouri) May 27 and June 4;
Gray (Delaware) May 22.
16. Ibid., Vest, May 27.
17. Ibid., Davis (Minnesota) and Vest, May 26.
18. Ibid., White (California) June 4.

19. Ibid., Sherman, June 4.
20. Ibid., Villas (Wisconsin) June 4.
21. Ibid., Sherman, May 22; Gear (Iowa) June 4.
22. Ibid., Callon (Illinois) May 26.
24. 29 Stat. L. 253.
25. Bur. of A. T. (1903) 290.
26. 132 U. S. 418 (1904)

CHAPTER X - TEA

1. Cons. Rept., Vol. 27 (1891) p. 460.
2. Cong. Rec. 2 s. 54 C., Feb. 23 - March 3, 1897.
3. 29 Stat. L. 604.

CHAPTER XI - OLEOMARGARINE

1. Cong. Rec. 7 s. 57 C. (H) Hansen (Iowa) Feb. 5, 1902.
2. Ibid., Quarles (Wisconsin) March 27, 1903.
3. Rep. of Com. Int. Rev. (1899) p. 1.
4. H. Rp. 2 s. 53 C., Vol. 4, No. 1398.
5. Cong. Rec. 1 s. 57 C., Hansen, Feb. 5, 1902;
Rep. of Bur. of A.I. (1899) p. 292.
6. Cong. Rec. 2 s. 56 C (H) Williams (Mississippi) and
Bailey (Kansas) Dec. 7, 1900.
7. Ibid., Bailey, Dec. 7.
8. Ibid., Foster (Illinois) and Pailey, Dec. 7.
9. Ibid., Bailey, Dec. 7.
10. Ibid., Bailey and Grosvenor (Ohio) Dec. 7.

11. Ibid., Lamb (Virginia); Alexander (New York): Tawney (Minnesota), Dec. 7.
12. Ibid., Butler (Pennsylvania) Dec. 7.
13. Ibid.
14. Ibid., Lamb. Dec. 7.
15. Ibid.
16. Cong. Rec. S. C. (4) January 15 - May 9, 1902.
Foster (Illinois) Feb. 3; Cowherd (Missouri) Feb. 4,
Scott (Kansas) Feb. 5; Lever (South Carolina) Feb. 11.
17. Ibid.
18. Ibid., Bellamy (North Carolina) Feb. 10, and Cowherd,
Feb. 4.
19. Ibid., Kleberg (Texas) Feb.; Lever, Feb. 10.
20. Ibid., Scott, Feb. 3, Cowherd, Feb. 4.
21. Ibid., Allen (Kentucky) Feb. 5; Bellamy, Feb. 11.
22. Ibid., Lever, Feb. 10.
23. Ibid., Lever, Feb. 10; Latham (Texas) Feb. 4; Picard-
son (Alabama) Feb. 11.
24. Ibid., Lever, Feb. 10; Stephens (Texas) Feb. 11.
25. Ibid., Henry (Connecticut) Feb. 5; Haskins (Vermont) Feb.
3; Cobb (Missouri), Bates (Tennessee) and Alexander (New
York) Feb. 4; Green (Pennsylvania) Feb. 10; Jackson
(Kansas) and Senor (Indiana) Feb. 11.
26. Ibid., Mangan, Feb. 5.
27. Ibid., Knapp (New York) Feb. 4; Klutz (N. Carolina) Feb.
5; Manger (Pennsylvania) Feb. 11.
28. Ibid., Tawney, Feb. 10.

29. Ibid., Bates and Hagen, Feb. 4; Maskins, Feb. 3.
30. Ibid., Driscoll (New York), Feb. 4; Green, Feb. 10.
31. Ibid., Green, Feb. 10.
32. Ibid., (s) Honey (Mississippi) Mar. 25, Stewart (Nevada), Mar. 26; Simmons (No. Carolina) Mar. 31.
33. Ibid., Stewart, Mar. 26; Money, Mar. 25.
34. Ibid., Hoar (Massachusetts) Mar. 26; Mcitfield (Idaho) Apr. 1;
35. Ibid., Rawlins (Utah) Apr. 3.
36. Ibid., Vest (Missouri) and Toeler, Apr. 3.
37. Ibid., Stewart, Mar. 26; Simmons and Patterson (N. Carolina) Mar. 31.
38. Ibid., Simmons, Mar. 31.
39. Ibid., Proctor (Vermont) Mar. 24; Harris (Kansas) Mar. 27; Spooner (Indiana) Apr. 1.
40. Ibid., Dolliver (Iowa) Mar. 26.
41. Ibid., Quarels (Wisconsin) Mar. 27; Harris, Mar. 31; Wensbrough (North Dakota) Mar. 25.
42. Ibid., Penrose (Pennsylvania) Apr. 3.
43. Ibid., Spooner, Apr. 3.
44. Ibid., Quarels, Mar. 27; Harris, Mar. 31; Spooner, April.
45. Stat. L. (1902)
46. 144 U.S. 677 (1892)
47. 155 U.S. 461 (1894)
48. 165 U.S. 526 (1897)
49. 171 U.S. 1 (1897)
50. 96 Fed. 837 (1899)

52. 108 Fed. 56 (1901)
53. 195 U.S. 27 (1904)

CHAPTER XII - MEAT

1. Pres. Mess., Vol. 13 (1892) p. 5763.
2. Ibid., (1893) p. 5887.
3. From the Repts. of the Bur. of A.I.
4. Rep. of Bur. of A.I. (1902) p. 391 and (1903) p. 10.
Yearbook of Dept. of Agr. (1903) p. 18.
5. Rep. of Bur. of A.I. (1906) pp. 23-29 and p. 103.
6. Yearbook of Dept. of Agr. (1890) pp. 69-80.
7. Pres. Mess. (1894) Vol. 13 p. 5957.
8. Rep. of Bur. of A.I. (1906) pp. 65 - 100.
9. Ibid., (1903) p. 428.
10. Ibid., (1904) p. 426.
11. Ibid., (1902) p. 467.
12. Ibid., (1903) pp. 432-425.
13. Ibid., (1904) p. 426.
14. Cong. Rec. 2 s. 57 C., Dec. 11, 1902 - Feb. 3, 1903.
15. Compilation from Bur. of A.I. Repts. and Yearbook of
Dept. of Agr.
16. Rep. of Bur. of A.I. (1906) 10-14.
17. Sinclair, Upton - Brass Check. (Pasadena, by the
Author, 1919) pp. 27 - 50.
18. Sinclair, Upton - Is the Jungle True", Independent, Vol.
60 (1906) pp. 1129 - 33.
19. Sinclair, Upton - Brass Check, pp. 27 - 50

20. Ibid.,
21. Sinclair, Upton - "Condemed Meat Industry," Everybody's
Vol. 14 (1906) pp. 608-16.
22. Lancet's Sanitary Commissioner, "Chicago Stock Yards",
Lancet, Vol. 168 (1905) pp. 45-50.
23. Ibid., (1904) Vol. 11, p. 1814.
24. Ibid., (1905) Vol. 1, p. 259.
25. Ibid (1904) Vol. II, p. 1813.
26. Jaques, W. K., "Meat Inspection does not inspect",
World's Work, Vol. 12 (1906) pp. 7491 - 7505.
27. "Trass Check." p. 33.
28. McKee, Thomas, "Failure of Government Inspection".
World's Work, Vol. 12 (1906) 7510 - 7515.
29. Wedger, Caroline, "Unhealthfulness of Packingtown".
World's Work, Vol. 12 (1906) pp. 7507-7510.
30. Rep. of Bur. of A.I., 1906, pp. 406-542.
31. Cong. Rec., 1 s. 59 C., June 4, 1906, p. 7800.
32. Bishop, Joseph B., Theodore Roosevelt and His Times,
2 Vols. (New York, Charles Scribner's Sons, 1920).
Vol. 2, p. 17 (hereafter cited as Bishop.)
33. Cong. Rec., 1 s. 59 C., June 4, 1906, p. 7800.
34. Bur. of A. I. (1906) pp. 406-442.
35. Cong. Rec. 1 s. 59 C., May 21 - June 30, 1906.
36. Bishop, p. 131; Roosevelt, Theodore, Autobiography, p.
473.
37. 34 Stat. 1., 674.

CHAPTER XIII - PURE FOOD AND DRUGS

1. Mason, H. B., "Vital Question of Pure Food." Review of Reviews, Vol. 21 (1900) pp. 67-70. (Hereafter cited as Mason, H.B., in Rev. of Rev.)
2. Allen, P. L., "Our Chaotic Laws." Nation. Vol. 77 (1903) p. 38. (Hereafter cited as Allen, P. L.)
3. Mason, W. T. "Adulteration of Food." North American Review, Vol. 170 (1900) pp. 548 -552. (Hereafter cited as Mason, W. T.)
4. Cong. Rec. 3 s. 54 C., June 4, 1896, p. 6092.
5. Mason. H. B., "Urgent Need of Pure Food Legislation". Outlook, Vol. 65 (1900) pp. 400 - 406.
6. Frear, W. "Leach's Food Inspection and Analysis". Science Vol. 21 (1905) p. 465.
7. Robin, Albert, "Adulteration of Food and Drugs". Journal of Pharmacy, Vol. 74 (1902) pp. 177-193.
8. McCumber, Porter, "Alarming Adulterations of Food and Drugs". Independent, Vol. 58 (1905) pp. 28-32.
9. Crampton, C. A. "Food Preservatives and Adulteration." Independent, Vol. 22 (1900) pp. 942-p 944.
10. Journal of Pharmacy, Vol. 72, p. 8.
11. From the Lancet. "Degradation of Food". Current Literature. Vol. 31 (1902) p. 451. (Hereafter cited as Lancet in Cur. Lit.)
12. Mason, H. B., In Rev. of Rev., Vol. 21, pp. 67-70.
13. McCumber, Ind., Vol. 58, pp. 28 - 33.
14. Mason, H.B., in Rev. of Rev., Vol. 21, pp. 67-70.

15. Editorial, "Senatorial Investigation", Science n.s.,
Vol. 9 (1899) pp. 792-795. (Hereafter cited as Editorial in Sci.)
16. Unsigned, "How our Common Foods are Adulterated."
World's Work, Vol. 7 (1904) pp. 4377-4378.
Wheeler, A. S., "Adulteration of Food". Outlook, Vol.
30 (1904) pp. 824-828.
17. Editorial, "Food Adulteration Scares". Independent.
Vol. 53 (1901) pp. 1148-1150. (Editorial in Ind. Vol.
53, pp. 1148-1150.)
18. Yearbook of Dept. of Agr. (1893) pp. 192-198.
19. Editorial, "Preservatives and Dyes in Articles of Food." Scientific American Supplement, Vol. 49 (1900) p.
20125. (Hereafter cited as Editorial in Sc. Am. Supl.)
20. Editorial in Ind. Vol. 53, pp. 1148-1150.
21. Editorial in Sci., Vol. 9, pp. 793-795.
22. Yearbook of Dept. of Agr. (1900) pp. 555-560.
23. Allen, P. S., "Pursuit of Pure Food." Nation, Vol. 79,
(1904) pp. 472-473.
24. Yearbook of Dept. of Agr. (1900) pp. 555-560.
25. Editorial, "Poison in our Food." Sc. Am. Supl., Vol 49
(1900) p. 20308.
26. Editorial, "Salicylic Acid in Food." Chm. Eng., Vol.
34 (1903) pp. 587-589.
27. Editorial, "Experiments in Food Preservatives". Sc. Am.,
Vol. 38 (1903) pp. 336-3.
28. Wiley, H. W., "Effect of Preservatives on Health." Ind.

- Vol. 55 (1903) pp. 1793-1795.
28. Yearbook of Dept. of Agr. (1904) p. 64.
Wiley, H. V., "Results of Forax Experiment." Sc. Am.
Sup. Vol. 58 (1904) pp. 23894-5; pp. 23906-7;
pp. 23922-3.
 29. Nason, H. B., Outlook, Vol. 65 p. 400-406.;
Memorial from National Pure Food and Drug Congress,
S.M.doc., 3 s. 55 C., Vol. 11, No. 167.
 30. Allen, F. L., Nation, Vol. 79, pp. 472-473.
 32. Cong. Rec. 1 s 52 C., Dec. 10, 1901 - March 3, 1902.
 33. Ibid., 1 s. 57 C., Jan. 29, 1902 - June 25, 1903.
 34. Ibid., 2 s. 57 C., Dec. 10, 1902 - Mar. 3, 1903.
 35. Adamson (Georgia) Dec. 18; Candler (Mississippi) Dec. 19.
 35. Ibid., Candler, Dec. 19.
 36. Ibid.
 37. Ibid.
 38. Ibid., Gardner (Massachusetts) Dec. 18.
 39. Ibid., Richardson (Alabama) and Dahle (Wisconsin) Dec. 19.
 40. Ibid., Dahle, Dec. 19.
 41. Ibid., Hepburn (Iowa) Dec. 19.
 42. Ibid., Gaines (Tennessee) Dec. 19.
 43. Ibid., Green (Pennsylvania) Dec. 19.
 44. Ibid., 1 s. 57 C., Jan. 1902-July 1, 1902.
 45. 32 Stat. L. 632.
 46. Cong. Rec. 2 s. 58 C., Dec. 8, 1903-Jan. 20, 1904. Adam-
son and Clarke (Missouri), and Bartlett (Georgia) Jan.
19.

47. Ibid., Bartlett, Jan. 17.
48. Ibid., Bartlett and Sherley (Kentucky) Jan. 19; Coldfogle (New York), Clarke, Grosvenor (Ohio) and Olmsted (Pennsylvania) Jan. 20.
49. Ibid., Sherley, Jan. 19.
50. Ibid., Clarke and Bartlett, Jan. 19.
51. Ibid., Heyburn and Richardson, Jan. 19.
52. Ibid., Bassett (New York) Jan. 20.
53. Ibid., Pou (North Carolina) Jan. 19.
54. Ibid., Bell (California) Jan. 19.
55. Ibid., Bailey (Texas) February 21.
56. Ibid., Spooner (Wisconsin) Feb. 20.
57. Ibid., Penrose (Pennsylvania) Feb. 21.
58. Ibid., Money (Mississippi) Feb. 19.
59. Ibid., Money (Mississippi) and Willman, Feb. 21.
60. Ibid., Spooner, Feb. 21.
61. Ibid., Foraker (Ohio) Feb. 19.
62. Ibid., Money, Feb. 19.
63. Ibid., Bailey, Feb. 21.
64. Ibid., Heyburn (Idaho) Jan. 19.
65. Ibid., Heyburn, Jan. 23.
66. Ibid., McCumber (North Dakota) Feb. 20.
67. Ibid., McCumber, Jan. 23.
68. Ibid., Adamson, June 21, Henry (Texas) June 22, Burgess (Texas) and Bartlett, June 23.
69. Ibid., Adamson, June 21.
70. Ibid.,

71. Ibid.
72. Ibid., Henry, June 22.
73. Ibid., Smith (Maryland) and Gill (Maryland) June 22;
Zeifer and Howell (Utah), June 23.
74. Ibid., Henry, June 22.
75. Ibid., Bartlett, June 23.
76. Ibid., Bartlett, June 23.
77. Ibid., Sherley, June 23.
78. Ibid., Slayden (Texas) June 23; Southard (Ohio) June 23.
79. Ibid., Hinshaw (Nebraska) and Gaines, June 23.
80. Ibid., Goulden (New York) June 22; Gaires, June 23.
81. Ibid., Cockran (New York) June 22.
82. Ibid., Stevens (Minnesota), Richardson, and Goulden,
June 22.
83. Ibid., Cockran and Sullivan (Massachusetts), June 22.
84. Ibid., Southard, June 23.
85. Ibid., Robinson (Arkansas) June 22; Gaines, June 23.
86. Ibid., Webb (N. Carolina) June 23.
87. Ibid., Mann (Illinois) June 29.
88. Wiley, T. T., "Food and Drug Law", J. of Phar. Vol. 79
(1907) p. 247.
89. 34 Stat. L. 768 (1906).

DIBLIOGRAPHY

Sources

1. Congressional Globe, 1844 - 1873.
2. Congressional Records, 1873 - 1906.
3. House Journals, 1844 - 1906.
4. Senate Journals, 1844 - 1906.
5. Reports of the Department of Agriculture, 1862 - 1906.
6. Yearbook of the Department of Agriculture, 1894 - 1906.
7. Reports of the Bureau of Animal Industry, 1884 - 1906.
8. Reports of the Department of the Treasury, 1848 - 1889.
9. Reports of the Commissioner of Internal Revenue, 1849 -
1856, 1883 - 1890.
10. Consular Reports, 1881 - 1905.
11. United States Statutes at Large.
 - 9 Stat. L. 238 (1848)
 - 22 Stat. L. 451 (1883)
 - 23 Stat. L. 31 (1884)
 - 24 Stat. L. 103 (1886)
 - 26 Stat. L. 414 (1890)
 - 26 Stat. L. 1089 (1891)
 - 29 Stat. L. 253 (1896)
 - 29 Stat. L. 604 (1897)
 - 34 Stat. L. 768 (1906)
 - 34 Stat. L. 674 (1906)
 - 32 Stat. L. 632 (1902)
 - 32 Stat. L. 193 (1902)

13. 144 U.S. 677 (1892)
- 155 U.S. 461 (1894)
- 165 U.S. 526 (1897)
- 171 U.S. 1 (1897)
- 195 U.S. 27 (1904)
- 192 U.S. 418 (1904)
- 96 Fed. 837 (1899)
- 101 Fed. 439 (1900)
- 108 Fed. 56 (1901)
14. Senate Miscellaneous Document 28. 51 C. Vol.3, No. 70.
15. Senate Miscellaneous Document 3s, 55 C. Vol. 11, No. 167
16. House Executive Document, 2s. 46 C. Pt. 1, No. 1.
18. House Executive Document, 2s. 36 C. Vol. 5, No. 43, PP.1-11.
18. House Report, 1s. 47 C. Vol. 5, No. 634.
19. House Report, 1s. 30 C. Vol. 3, No. 664.
20. Department of Agriculture, Diseases of Animals (1916)
21. Accum, F.C., "Treatise on Adulteration of Food and Culinary Poisons." (Philadelphia, Ab'm. Small, 1820)
22. Bailey's Report, Proceedings of the Pharmaceutical Association, Vol. 1 - 4, (1851) p. 26.
23. Bishop, Joseph., Theodore Roosevelt and His Times. 2 Vols. (New York, Charles Scribner's Sons. 1920).
24. Hassall, A. H., Adulterations Detected. (London, Spottiswoode and Company, 1861).
25. Hassall, A. H., Food and its Adulteration and Methods of Detection. (London) Longman, Green and Company, 1876).

26. Hedger, Caroline, "Unhealthfulness of Packingtown."
World's Work, Vol. 12 (1906), pp. 7507-7510.
27. Jaques, F. R., "Meat Inspection does not Inspect."
World's Work, Vol. 12 (1906) pp. 7491-7505.
28. Lancet's Sanitary Commissioner, "Chicago Stock Yards."
Lancet (London), Vol. 163 (1904-1905) pp. 45-50;
1813; 259.
29. McKee, Thomas, "Failure of Government Inspection."
World's Work, Vol. 12 (1906) pp. 7510 - 7511.
30. Richardson, James, Compilation of Messages and Papers of the Presidents. 20 Vols.
(New York, Bureau of National Literature, Incorporated, 1897). (With additions and encyclopedic index by Private Enterprise).
31. Sinclair, Upton, Brass Check. (Pasadena, by the Author, 1919).
32. Sinclair, Upton, "Condemned Meat Industry". Liveryoody's, Vol. 14 (1906) pp. 608-16.
33. Sinclair, Upton, Jungle. (New York, Doubleday, Page and Company, 1906).
34. Sinclair, Upton, "Is the Jungle True," Independent, Vol. 60 (1906) pp. 129-133.

SECONDARY.

35. Allen, P. L. "Our Chaotic Laws". Nation, Vol. 77 (1902) p. 88.
36. Allen, P. L. "Pursuit of Pure Food". Nation, Vol. 79

- (1904) p. 472-3.
37. Angell, G. T. "Adulteration of Food." American Journal of Social Science, Vol. 13 (1881) p. 123.
 38. Bigelow, W. D. "Development on Legislation for Pure Food." Science, Vol. 7, pp. 505-13.
 39. Blackwood Magazine Editorial, "Accum on Adulteration". Vol. 6 (1820) pp. 452-554.
 40. Connelley, W. F. Life of Preston B. Plumb. (Chicago, Browne and Howell Company, 1913).
 41. Cortissog, Royal. Life of Whitelaw Reid. (New York, Charles Scribner's Sons, 1921) 2 vols. Vol. 1, Ch. 7-8.
 42. Crampton, C. A. "Food Preservatives and Adulterants." Independent, Vol. 22 (1900) pp. 942-944.
 43. Current Literature, Editorial. "Salicylic Acid in Food." Vol. 34 (1903) pp. 587-89.
 44. Dictionary of National Biography. Accum. (London, New York, 1885). Vol. 1, p. 57.
 45. Dublin Review, Editorial. "Age of Honesty". Vol. 31 (1851) pp. 589-611.
 46. Encyclopedia Britannica. Eleventh Edition. Articles on "Adulteration"; "Trichina"; "Oleomargarine".
 47. Frankel, Lee K. "Food Adulteration and Pure Food Laws". Journal of Franklin Institute, Vol. 143 (1897) p.241.
 48. Frear, W. "Leach's Food Inspection and Analysis". Science, Vol. 21 (1905) p. 465.

49. Hendrick, Burton. "Eight Years of Pure Food Law". McClure Vol. 44 (1915) pp. 59-70.
50. Hunt's Merchant Magazine, "Adulteration in English Groceries", Vol. 41 (1859) p. 652.
51. Hunt's "Tea in China". Vol. 47 (1862) p. 452.
52. Independent, Editorial. "Food Adulteration Scares". Vol. 53 (1901) pp. 1148-1150.
53. Johnson, S. W. "Debate on Adulteration of Food", American Journal of Social Science, Vol. 13 (1881) p. 99.
54. Lancet, "Degradation of Food". Current Literature, Vol. 31 (1902) p. 451.
55. Mason, H.B. "Urgent Need of Pure Food Legislation". Outlook, Vol. 65 (1900) p. 400.
56. Mason, H. B. "Vital Question of Pure Food". Review of Reviews, Vol. 21 (1900) pp. 67-70.
57. Mason, W. F. "Adulteration of Food." North American Review, Vol. 170 (1900) pp. 548-552.
58. McCumber, Porter. "Alarming Adulteration of Food and Drugs". Independent, Vol. 58 (1905) pp. 28-33.
59. Miller, Adolph. "Adulterations". Journal of Pharmacy, Vol. 49 (1874) p. 57.
60. North American Review, "Food and Its Adulteration", Vol. 49 (1862) pp. 1 - 4.
61. New York College of Pharmacy, "Adulteration of Drugs". Journal of Pharmacy, Vol. 19 (1847) p. 305.
62. New York College of Pharmacy, "Adulteration of Medicines".

- Hunt's Merchant Magazine, Vol. 18 (1848) p. 442.
63. Patronillard, M. "False White Ginger". Journal of Pharmacy, Vol. 46 (1874) pp. 562-563.
64. Pharmaceutical Journal, Editorial. "Adulteration of Drugs." Vol. 11 (1851-1852) p. 343.
65. Richards, E. "Substitutes and Adulterants". Science, Vol. 15, p. 86.
66. Robin, Albert. "Adulteration of Food and Drugs." Journal of Pharmacy, Vol. 74 (1902) pp. 177 - 193.
67. Scientific American Supplement, Editorial. "Preservatives and Dyes in Articles of Food." Vol. 49 (1900) p. 20125.
68. Scientific American Supplement. "Poisons in Our Food." Vol. 49 (1900) p. 20308.
69. Scientific American, Editorial. "Experiment in Food Preservatives", Vol. 83 (1903) p. 336-338.
70. Science, "Senatorial Investigation". Vol. 9 (1899) pp. 793-795.
71. Von Holst, H. "Adulteration in Germany." Nation, Vol. 26 (1878) p. 129.
72. Thompson, Walter, "Federal Centralization". (New York, Harcourt, Brace and Company.)
73. Waller, E. "Danger in Food and Drugs". Century, Vol. 9 (1886) pp. 303-307.
74. Wells, David. Economic Monograph. (New York, G.P. Putnam's Sons, 1878) p. 5.
75. Wheeler, A.S., "Adulteration of Food". Outlook, Vol. 80,

p. 824-828.

76. Wiley, H. W. "Effect of Preservatives on Health". In-
dependent, Vol. 55 (1903) p. 1793.
77. Wiley, H. W. "Results of Borax Experiment", Scientific
American Supplement, Vol. 58 (1904) pp. 23894-5; 23906-
7; 23922-3.
78. World's Work. "How our Common Foods are Adulterated".
Vol. 7 (1904) p. 4377.