

# Indiana State Board of Health

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The MONTHLY BULLETIN will be sent to all health officers and deputies in the State. Health officers and deputies should carefully read and file each copy for future reference. This is very important, for we expect to print instructions, rules and general information, which it will be necessary for officers to preserve.

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## AUGUST BIRTHS.

Birth reports are always a month late because the law gives twenty days in which doctors and midwives may report.

Total births, 4,714. Males, 2,372; females, 2,342. Birth rate, 20.3 per 1,000 population. Excess of birth rate over death rate, 8.5.

Whites—Total, 4,640; males, 2,335; females, 2,305.

Negroes—Total, 74; males, 37; females, 37. The highest birth rate was in Warren County, 34.8, and the lowest in Whitley, 11.1.

## ABSTRACT OF MORTALITY STATISTICS FOR SEPTEMBER, 1909.

Total number of deaths, 2,660; annual rate, 11.8. In the same month last year, 2,755; rate, 12.3. In the preceding month, 3,164; rate, 13.6. Deaths by important ages were: Under 1 year, 440, or 17.5 per cent. of the total; 1 to 5, 214; 5 to 10, 59; 10 to 15, 50; 15 to 20, 77; 65 and over, 724, or 28.8 per cent. of the total.

**SANITARY SECTIONS:** THE NORTHERN SANITARY SECTION, population 920,585, reports 890 deaths; rate, 11.7. In the preceding month, 1,023 deaths; rate, 13.1. In the corresponding month last year, 950 deaths; rate, 12.5.

CENTRAL SANITARY SECTION, population 1,089,818, reports 1,163 deaths; rate, 13.0. In the preceding month, 1,374 deaths; rate, 14.8. In the same month last year, 1,136 deaths; rate, 12.2.

SOUTHERN SANITARY SECTION, population 722,147, reports 607 deaths; rate, 10.2. In the preceding month, 767 deaths; rate, 12.5. In the same month last year, 669 deaths; rate, 11.3.

**REVIEW OF SECTIONS:** The Central Sanitary Section shows the highest death rate, being 1.2 higher than the rate for the whole State. This section also shows the highest death rate in the following diseases: Tuberculosis, pneumonia, cerebro-spinal meningitis, cancer and violence. The Northern Sanitary Section shows the highest death rates in scarlet fever, diarrhoeal diseases, influenza, puerperal septicemia. The Southern Sanitary Section shows the highest death rates in typhoid fever, diphtheria, whooping cough.

**CITIES:** Total population, 1,050,310, report 1,195 deaths; rate, 13.8. In the same month last year, 1,192 deaths; rate, 13.8. The city death rate is 2.0 higher than the rate for the whole State, and 3.2 higher than the country rate. The death rates of cities having over 10,000 population are as follows: Indianapolis, 13.8; Evansville, 11.5; Ft. Wayne, 13.4; Terre Haute, 15.5; South Bend, 14.2; Anderson, 14.6; Columbus, 12.2; East Chicago, 27.7; Elkhart, 13.5; Elwood, 8.8; Hammond, 13.4; Jeffersonville, 16.2; Kokomo, 11.4; Lafayette, 19.4; Laporte, 20.7; Logansport, 16.7; Marion, 9.0; Michigan City, 18.0; Muncie, 10.5; New Albany, 10.6; Peru, 6.9; Richmond, 14.3; Vincennes, 9.6.

## SUMMARY OF MORBIDITY AND MORTALITY FOR SEPTEMBER, 1909.

Typhoid fever was reported as the most prevalent disease. This was also the case in the corresponding month last year. It stood second in area of prevalence in August. Diarrhoea, which was first in order of prevalence in August, fell to fifth place in September. The order of disease prevalence was as follows: Typhoid fever (enteric), rheumatism, tonsilitis, scarlet fever, diarrhoea, bronchitis, diphtheria and membranous croup, intermittent and remittent fever, dysentery, cholera infantum, cholera morbus, influenza, inflammation of bowels, pneumonia, pleuritis, typhomalaria fever, erysipelas, whooping cough, measles, puerperal fever, smallpox, cerebro-spinal meningitis, chickenpox.

**SMALLPOX:** Fifty-one cases reported from 9 counties with no deaths. In the corresponding month last year 32 cases in 8 counties with no deaths. In the preceding month, 29 cases in 2 counties with no deaths. The following counties reported the disease present: Adams, 3; Allen, 20; Grant, 11; Greene, 11; Huntington, 1; Johnson, 2; Monroe, 1; Vanderburgh, 1; Whitley, 1.

**TUBERCULOSIS:** Total number of deaths from all forms, 307, of which 244 were pulmonary. Total deaths in the same month last year, 318, of which 263 were pulmonary. Of the total consumption deaths in September 142 were males and 165 females. Of the males, 19 were fathers in the age period of 18 to 40, and left 36 orphans under 12 years of age. Of the females 58 were mothers in the same age period and left 116 orphans under 12 years of age. Total number of orphans made by the preventable consumption in one month, 154. Homes invaded, 290.

**PNEUMONIA:** 86 deaths, 45 males, 41 females. It stood fourteenth in area of prevalence, as in the same month last year. In the corresponding month last year the deaths numbered 93. In the preceding month 57, and it stood nineteenth in area of prevalence. The male deaths numbered 28, females 29.

**TYPHOID FEVER:** Total deaths, 132. There were 757 cases reported from 81 counties. In the same month last year, 446 cases in 76 counties, with 118 death. In the preceding month, 464 cases reported in 69 counties, with 106 deaths. The disease prevailed unusually in the following counties: Harrison, 62 cases; Marion, 88; Martin, 28.

**DIPHTHERIA:** 279 cases from 42 counties, with 24 deaths. In the corresponding month last year, 352 cases in 32 counties with 29 deaths. In the preceding month, 130 cases in 30 counties with 17 deaths.

**VIOLENCE:** Deaths numbered 179. In the corresponding month last year, 217. In the preceding month, 233. Of the 179 deaths, 5 were murders, 23

suicides and 151 accidents. Of the murders, 4 males were killed by gunshots, 1 female by fracture of skull. Of the suicides, 6 males chose gunshots; hanging, 2 males and 1 females; cutting and stabbing, 3 males; jumping in front of trains, 1 male; carbolic acid poisoning, 4 males and 2 females; other poisons, 2 males and 2 females. Of the accidental deaths, steam railways killed 34, interurbans 1; street cars, 2; automobiles, 1; machinery, 5; crushing injuries, 7; fractures, 10; falls, 17; burns and scalds, 12; drowning, 7; gunshots, 8; horses and vehicles, 14; electricity, 4; ptomain poisoning, 2; and the remainder by various methods.

## REPORT OF THE BACTERIOLOGICAL LABORATORY FOR SEPTEMBER, 1909.

J. P. SIMONDS, M. D., SUPT.

Sputum for tubercle bacilli, positive 77, negative 196; blood for Widal reaction, positive 35, negative 234; throat cultures for diphtheria bacilli, positive 49, negative 88, unsatisfactory (no growth), 1; blood for malaria parasites, positive 6, negative 28; pus for gonococci, males positive 10, negative 17; female positive 2; for rabies, dogs' heads, positive 3, negative 5; cow's head, negative 1; pig's head, positive 1; urine 21; blood cultures 7; blood smears other than malaria, 4; blood clot from vomitus, 1; pleural effusion, 1; ice cream, 1; milk, 4; carcinoma, 2; sarcoma, 1; other pathological tissues, 11; feces, 6; scrapings from cow's rectum for tubercle bacilli, positive, 1; pseudo parasites (intestinal), from eating bananas, 1; pseudo gall stones, 1; fly larvae in feces from eating raw fruit, 1. Total, 830.

Outfits sent out: Sputum 447, widal 412, diphtheria 308, malaria 135. Total, 1,302.

## REPORT OF THE DEPARTMENT OF FOOD AND DRUGS, STATE BOARD OF HEALTH, FOR SEPTEMBER, 1909.

H. E. BARNARD, STATE FOOD AND DRUG COMMISSIONER.

The examination of such seasonable foods as summer drinks and ice cream occupied most of the time of the chemists during the month of September. Of the 16 ice cream samples analyzed, but one was illegal. Of the 151 samples of summer drinks, which included unfermented fruit juices, pops, ginger ales and similar preparations made up from syrups and fruit flavors, 36 were illegal, in most instances because of the use of saccharin as a substitute for sugar. A few samples contained benzoate of soda and others were artificially colored or improperly labeled. Two hundred and thirty-two samples of foods were analyzed during the month, of which 184 were legal and 48 illegal, showing a percentage of adulteration of 20 per cent.

## MONTHLY REPORT OF ANALYSES OF FOODS AND DRUGS.

The following summary presents the results of the examinations of food made at the Food and Drug Laboratory of the State Board of Health during the month of September, 1909.

ARTICLE EXAMINED.	Number Legal.	Number Illegal.	Total.
<b>FOODS.</b>			
Cream.....	0	1	1
Creamthick.....	0	1	1
Butter.....	6	0	6
Milk.....	3	1	4
Ice Cream.....	15	1	16
Vinegar.....	10	2	12
Oleomargarine.....	10	0	10
Baking Powder.....	6	0	6
Lard.....	5	0	5
Lemon Flavor.....	3	2	5
Apple preserves.....	1	0	1
Preservative.....	1	0	1
Parfait Powders.....	1	0	1
Summer Drinks.....	115	36	151
Cider.....	2	4	6
Total.....	184	48	232

## INSPECTORS' REPORTS FOR THE MONTH OF SEPTEMBER, 1909.

September is the month during which the canning factories are most actively engaged in the handling of tomatoes, and the inspectors gave much of their time to the study of factory conditions. In addition to this work, which will be recorded in full in the next issue of the Bulletin, 357 inspections of dairies, gro-

ceries, meat markets, slaughter houses and other food producing establishments were made. Of the 74 grocery stores visited, 39 were in good condition and 23 were fair, 7 were classed as poor and 3 as bad, while 2 were in excellent condition. Of the 25 meat markets visited, 14 were in good condition, 9 fair and 2 poor. The condition of hotels and restaurants shows but little improvement over the reports heretofore made. Of the 35 inspections made, 7 places were reported as in good condition, 15 were fair, 11 poor and 2 were bad. It is worthy of note that of the 7 poultry houses visited, 1 was in good shape and 6 fair, while none were reported as poor or bad. While men in charge of poultry houses deserve no credit for what they have done in view of the report of fair conditions rather than of excellent or good, yet the fact that no places were found to be in bad or even in poor shape is indicative of a decided improvement in the sanitary surroundings. Twenty-nine drug stores were inspected during the month, of which 20 were in good shape, 6 fair and 3 were poor. Other inspections included visits to flour mills, bottling works, cider and vinegar works and creameries.

During the month 18 cases were brought against dealers in adulterated goods or against proprietors of unsanitary establishments. In every case the defendant plead guilty or upon trial was found guilty and fined. Five cases involved the sale of ice-cream which contained less than 8 per cent. of butter fat as required for a legal cream. Three convictions followed the sale of summer drinks sweetened with saccharin. Three dealers were fined for selling summer drinks containing benzoate of soda in violation of the law. One dealer paid a fine for selling pop preserved with salicylic acid. The proprietors of three unsanitary restaurants were fined in two instances ten dollars and costs, and in one instance twenty dollars and costs. Two druggists were convicted of selling tincture of iodine below standard. Two milk men were prosecuted for selling skimmed milk.

The fines and costs imposed during the month amounted to \$351.80.

## LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW DURING THE MONTH OF SEPTEMBER, 1909.

COUNTY.	Lab. No.	Name and Address of Defendant.	Illegal Sale of	Date of Trial.	Disposition of Case.	
					By the Court.	Fines.
Carroll.....	15752	Harry L. Sharp, Delphi.....	Ice cream below standard.....	9-15-09	Guilty.....	\$10 and costs.
Carroll.....	15750	Delphi Ice Cream Co.....	Ice cream below standard.....	9-15-09	Guilty.....	\$10 and costs.
Clinton.....	15710	Fred Waldron, Mulberry.....	Orchard, saccharin.....	9-14-09	Guilty.....	\$10 and costs.
Clinton.....	15716	Fred Waldron, Mulberry.....	Pop, saccharin and benzoate.....	9-14-09	Guilty.....	\$10 and costs.
Davies.....	15283	Arch Yazel, Elletts.....	Tr. iodine below standard.....	9-14-09	Guilty.....	\$10 and costs.
Lawrence.....	15212	Dodd & Douthitt, Bedford.....	Tr. iodine below standard.....	8-1-09	Guilty.....	\$10 and costs.
Miami.....	15736	Sanitary Milk Co., Peru, Ind.....	Milk, skimmed.....	8-19-09	Guilty.....	\$10 and costs.
Montgomery.....	15996	C. W. Reeves, Crawfordsville.....	Ice cream below standard.....	9-13-09	Guilty.....	\$10 and costs.
Montgomery.....	15998	C. J. Reiman, Crawfordsville.....	Ice cream below standard.....	9-13-09	Guilty.....	\$10 and costs.
Montgomery.....	16003	B. F. Conrad, Darlington.....	Orchard, benzoate.....	9-13-09	Guilty.....	\$10 and costs.
Montgomery.....	16034	Walter M. Chesterson, Darlington.....	Pop, saccharin.....	9-13-09	Guilty.....	\$10 and costs.
Owen.....	15739	E. B. Phillips, Spencer.....	Unsanitary restaurant.....	7-23-09	Guilty.....	\$10 and costs.
Ripley.....	14732	Frank J. Roell, Batesville.....	Milk, below standard.....	9-27-09	Guilty.....	\$10 and costs.
Sullivan.....	15622	Hicks & Brown, Carlisle.....	Pop, benzoate.....	9-27-09	Guilty.....	\$10 and costs.
Sullivan.....		Nathan Cox, Sullivan.....	Unsanitary restaurant.....	9-28-09	Guilty.....	\$20 and costs.
Sullivan.....		Stivers & Draper, Sullivan.....	Unsanitary restaurant.....	9-28-09	Guilty.....	\$10 and costs.
Tippecanoe.....	15679	Jos. Stewart, Colburn.....	Pop, salicylic acid.....	9-14-09	Guilty.....	\$15 and costs.
Wabash.....	15739	Win. Newmann, Wabash, Ind.....	Ice cream below standard.....	8-24-09	Guilty.....	\$10 and costs.

## SUMMARY OF INSPECTIONS DURING THE MONTH OF SEPTEMBER, 1909.

INSPECTIONS.	No. Inspected.	No. Excellent.	No. Good.	No. Fair.	No. Poor.	No. Bad.
Dairies.....	17	0	4	7	5	1
Grocery stores.....	74	2	29	23	7	3
Meat markets.....	25	0	14	9	2	0
Drug stores.....	29	0	20	8	3	0
Bakeries and confectioneries.....	24	2	6	8	6	2
Hotels and restaurants.....	35	0	7	15	11	2
Slaughter houses.....	1	0	0	3	2	2
Poultry houses.....	1	0	1	8	0	0
Creameries.....	3	0	1	2	0	0
Flour mills.....	6	0	3	2	0	0
Bottling works.....	1	0	1	0	0	0
Ice cream factories.....	1	0	0	1	0	0
Canning factories.....	32	0	16	16	0	0
Cider and vinegar works.....	1	0	0	1	0	0
Total first inspections.....	261	4	112	99	36	10
Total second inspections.....	92	0	54	34	4	0
Total third inspections.....	4	0	3	1	0	0
Total number inspections made.....	357	4	169	134	40	10

## INSPECTORS' REPORTS FOR THE MONTH OF SEPTEMBER, 1909.

## AMBOY, MIAMI COUNTY—

Two inspections were made. One creamery and 1 canning factory were visited and found in fair shape.

## ANGOLA, STEUBEN COUNTY—

Of three dairies visited, 1 was found good, 1 fair and 1 poor. Three grocery stores, 2 meat markets and 1 drug store were visited and found in good condition. One poultry house was visited and found in fair shape. One slaughter house was visited and found to be in bad condition.

## BRIDGEPORT, MARION COUNTY—

One dairy was visited and found in good condition.

## CLAY CITY, CLAY COUNTY—

One grocery store was visited and found in good condition.

## COAL CITY, OWEN COUNTY—

Eight inspections were made. Of 2 grocery stores visited, 1 was found good and 1 fair. One meat market was found to be in fair shape. Notice was given to whitewash back room. One drug store was visited and classed as good. Three poultry houses were rated fair. Notice was given to clean up everything at once. One restaurant was found to be in fair shape.

**COLUMBIA CITY, WHITLEY COUNTY--**

Two dairies, 1 meat market, 1 poultry house and 1 ice-cream factory were visited and found to be in fair shape. One grocery store was visited and found to be in good condition.

**ELNORA, DAVIESS COUNTY--**

Five grocery stores and 1 meat market were visited and found in fair shape. Of 3 drug stores visited, 1 was found good and 2 fair. One restaurant was found fair and 2 poor. One bakery was found fair and 2 poor. One canning factory and 2 flour mills were visited and found in fair shape.

**FORT WAYNE, ALLEN COUNTY--**

One grocery store and 1 meat market were visited and found in fair shape.

**FREEDOM, OWEN COUNTY--**

Of 5 grocery stores visited, 1 was found good, 2 fair and 2 poor. Three restaurants and 1 poultry house were visited and found in fair shape.

**KENDALLVILLE, NOBLE COUNTY--**

Twenty-one inspections were made. Of 9 grocery stores visited, 1 was found fair, 7 good and the grocery store owned by W. A. DeVaults was found to be in excellent condition. Of 4 meat markets visited, 2 were found good and 2 fair. Two drug stores and 2 restaurants were visited and found in good condition. One confectionery was visited and rated good and 1 was rated fair. The bakery owned by Fred Hess was found to be in excellent shape.

**LAGRANGE, LAGRANGE COUNTY--**

Of 8 grocery stores visited, 6 were found good and 2 fair. Two meat markets and 3 drug stores were visited and rated good. Two restaurants were inspected and 1 was found fair and 1 poor. One bakery was found poor and 1 good. The confectionery owned by A. M. Tillman was visited and found in excellent condition.

**MARCO, GREENE COUNTY--**

Of 6 grocery stores visited, 2 were found fair, 1 poor and 3 bad. Notice was given to clean everything at once. One drug store was found in poor shape. One restaurant was visited and found in fair shape. One hotel was visited and rated poor. One restaurant and 1 confectionery were visited and both were condemned and closed until made sanitary.

**MARENGO, CRAWFORD COUNTY--**

Of 3 grocery stores visited, 2 were found good and 1 fair. One meat market and 2 confectioneries were visited and found in good condition. One drug store was found good and 1 poor. One hotel was rated good and 1 poor. One restaurant was found fair and 1 poor. One slaughter house and 1 canning factory were visited and found in fair shape. An order was given to repair floors and screen toilets of canning factory.

**NEWBERRY, GREENE COUNTY--**

Of 8 grocery stores visited, 4 were found good, 3 fair and 1 poor. Three meat markets were visited and 1 was found good, 1 fair and 1 poor, being unclean and unsanitary. One slaughter house was visited and found in poor shape. Two drug stores were rated fair. One restaurant was found poor and 1 fair. One flour and feed mill was found in good condition. One flour mill was found fair.

**NORTH MADISON, JEFFERSON COUNTY--**

One creamery was visited and found in good condition.

**ODON, DAVIESS COUNTY--**

Four grocery stores were visited. One was found good, 1 fair and 1 poor. One drug store was found good and 1 fair. One bakery, 1 cider and vinegar works, and 2 restaurants were visited and found to be in fair shape.

**PERU, MIAMI COUNTY--**

Two canning factories were visited and found in good condition.

**PLAINFIELD, HENDRICKS COUNTY--**

Five dairies were visited and 2 were found in good condition, 2 fair and 1 poor. Notice was given to screen milkhouse and clean stable.

**PLYMOUTH, MARSHALL COUNTY--**

Three dairies were visited and all were found to be in an unsanitary condition. Two were rated poor and 1 bad. One slaughter house was found to be in a bad condition.

**PIERCETON, KOSCIUSKO COUNTY--**

Four inspections were made, of 1 grocery store, 1 meat market, 1 drug store and 1 canning company, and all were found to be in good condition.

**SPENCER, OWEN COUNTY--**

One dairy and 1 creamery were visited and found to be in fair shape. Of 7 grocery stores visited, 3 were found good, 2 fair and 2 poor. One meat market was found good and 1 poor. One restaurant was found good, 2 restaurants fair and 3 restaurants poor. Notice was given to clean up at once. Two confectioneries and 1 bakery were visited and found in fair shape. One bakery was found in poor condition and 1 bad, being unclean and unsanitary. One flour mill, 1 poultry house and 2 drug stores were visited and found in good condition. The Spencer Mercantile Company was visited and found to be in excellent condition.

**SULLIVAN, SULLIVAN COUNTY--**

One grocery store and 1 meat market were visited and found to be in fair shape. The grocery store owned by H. D. Dutton was visited and found to be in excellent condition. Two drug stores were visited and 1 was found in fair shape and 1 poor. Notice was given to clean up fountain and stop spitting on floors. Four restaurants were visited. One restaurant was found good and 1 fair. One restaurant was found poor and 1 bad. One confectionery was visited and rated poor, being unclean and unsanitary.

**VEEDERSBURG, FOUNTAIN COUNTY--**

One dairy was visited and found in fair shape. One slaughter house was visited and rated poor. Notice was given to clean up, whitewash and screen at once.

**WABASH, WABASH COUNTY--**

Eleven inspections were made. Two grocery stores, 3 drug stores, 1 hotel, 2 confectioneries and 2 canning factories were visited and found to be in good condition. One bottling works was visited and found to be in fair shape.

**WALKERTON, ST. JOSEPH COUNTY--**

Twelve inspections were made. One dairy was visited and found to be in poor shape, being unclean and unsanitary. One grocery store and 2 meat markets were inspected and found to be in good condition. Two drug stores were found good and 1 fair. One restaurant was found good and 1 fair. One bakery, 1 confectionery and 1 canning factory were inspected and found in fair shape.

**WHITING, LAKE COUNTY--**

Of 4 grocery stores visited, 3 were found good and 1 fair. Two meat markets were found good and 1 fair. One drug store was found good. One bakery was found to be in poor shape, the bakeshop being unclean, and the goods were not properly handled.

**WORTHINGTON, GREENE COUNTY--**

Two slaughter houses were visited and found to be in fair shape.

## WHAT SANITARY INSPECTION MAY ACCOMPLISH.

A noticeable fact in the sanitary inspection of food producing establishments is the increased percentage of places classed as good, and the lessened number of places graded as poor and bad on second and third inspections, making it apparent that the visit of food inspectors is followed by decidedly improved conditions. The grocer who is advised in a friendly way to clean up his bakeshop, wash his windows, remove spittoons and dust his stock in trade, if he is an intelligent man, is quick to see the advantage to his business of following the suggestions of the inspector. The butcher, when the dampness, mould and bad odor of his refrigerator is pointed out to him, usually wonders why he did not notice the unsanitary condition himself, and after the visit made by the inspector introduces into his business more careful attention to the details which produce cleanliness.

In order to determine how much improvement in sanitary conditions follows the visit of the inspector, four of the regular inspectors were instructed to visit for three consecutive months twenty-five business houses, including meat markets, grocery stores, hotels and restaurants, drug stores and such other food producing establishments as they might see fit to inspect. The results of each inspection have been tabulated in terms of percentage based upon the score of 100 as being the highest score possible of attainment. The inspectors followed their usual method of reporting sanitary conditions as excellent, good, fair, poor and bad, and the percentages have been calculated from these reports. The improvement in conditions is shown by the results of the second and third inspections, which are in most instances very marked.

Inspector Bruner visited 18 meat markets, which on first inspection showed a score of 59.7 and on the third scored 81.1. Inspector Owens scored 5 meat markets 58 on first inspection, 76 on second inspection and 82 on third inspection. Inspector Tucker, who visited 15 meat markets, noted an improvement of 10 points. Inspector Cohn, who visited 10 hotels and restaurants, noted an improvement of 14 points. Inspector Tucker showed an improvement of 22 points. A study of the table given below shows plainly that the inspection work is of great value and that the results obtained are permanent in character. No grocer or butcher who, perhaps against his will, cleans his shop thoroughly to conform to the sanitary food law will, if he is a competent business man, allow slipshod methods and uncleanness again to be a rule in his store.

## RESULTS OF INSPECTORS' WORK.

(Improvement Noted in Percentages.)

INSPECTOR.	Meat Markets.				Grocery Stores.			
	Inspections.				Inspections.			
	No.	First.	Second.	Third.	No.	First.	Second.	Third.
Bruner.....	18	59.7	77.8	81.1	4	76.2	82.5	82.5
Owens.....	5	58.0	76.0	82.0	2	40.0	55.0	65.0
Cohn.....	4	75.0	80.9	76.5	4	72.5	80.0	85.0
Tucker.....	15	70.3	76.7	80.1	4	67.5	72.5	80.0

INSPECTOR.	Hotels and Restaurants.				Drug Stores.			
	Inspections.				Inspections.			
	No.	First.	Second.	Third.	No.	First.	Second.	Third.
Bruner.....	1	40.0	60.0	60.0	3	76.7	88.3	91.7
Owens.....	11	57.7	59.5	63.2	6	75.8	79.1	84.2
Cohn.....	10	66.0	76.0	80.0	3	68.3	73.3	76.7
Tucker.....	3	60.0	66.7	81.7				

INSPECTOR.	Miscellaneous.			
	Inspections.			
	No.	First.	Second.	Third.
Bruner.....	2	72.5	85.0	85.0
Owens.....	4	40.0	56.2	67.2
Cohn.....	1	60.0	85.0	85.0
Tucker.....				

## REPORT OF THE DEPARTMENT OF FOOD AND DRUGS, STATE BOARD OF HEALTH, FROM MARCH, 1909, TO OCTOBER 1, 1909.

H. E. BARNARD, CHEMIST, STATE FOOD AND DRUG COMMISSIONER.

While the results of the work of the laboratories have been published each month, the analytical data obtained in the examination of different brands of food and drug products has not been given. In order that the trade and the consumer may know which

brands of food and drugs have been found to be illegal, as well as those which are of standard quality and that the data obtained in the analysis may be preserved, the tables are here printed in full.

During the seven months, 1,423 samples of food have been analyzed: 979 samples were found to be of standard quality and properly labeled, while 444, or 30.5 per cent., were adulterated or misbranded. Since the work was carried on for the most part during the summer months, the samples were largely of those products most commonly consumed during hot weather, such as ice cream, beverages and milk. Most of the samples analyzed were submitted by inspectors of the department, who purchased them from dealers. Many milk samples were sent to the laboratories by milk inspectors of cities having no facilities for determining the character of the samples. Because of the recent active enforcement of the internal revenue laws which regulate the sale of adulterated butter, many samples of butter were submitted by farmers and butter-makers who wished to determine whether or not their product contained more than the legal amount of water.

A large number of samples of prepared meats sold as sausage under various names were examined for starch and preservatives, and the percentage of adulteration of these goods was found to be very high.

A study of the analytical tables is very interesting, in that the changed condition of the food market is plainly shown by the fact that such standard products as extracts, canned goods, baking powders, preserves, confectionery and olive oil are no longer subject to adulteration, while before the passage of the pure food law all of these products were constantly grossly adulterated.

At the present time the artifice of the imitator and sophisticator seem to be confined largely to such foods as milk, butter, prepared meats, beverages, vinegars, etc., products not commonly made in large quantities and sold through the jobber, but, on the contrary, prepared by the retailer himself. This is true of milks, butter, sausages, ice creams and lard. The work of inspection of food products is thus being more and more confined to a critical study of the products of the small dealer, who does business in a local way only. The manufacturer engaged in interstate trade has been, both by the laws and federal food regulations, brought to see the advantages of producing pure goods, but the milk man who skims or waters his milk, the butcher who sells a mixture of starch and water and meat as sausage, the fish dealer who waters his oysters, the ice cream maker who cuts down the cost of his product by substituting skimmed milk for cream, seems, as yet, to be unhampered by business ethics or controlled by food legislation.

## FOODS.

## MILK.

Sixty-five of the 395 milk samples analyzed were adulterated either by the removal of butter fat, by the addition of water or by the presence of extraneous material, usually dirt or manure. The presence of dirt to such an extent that it may be detected by looking through the bottom of the milk bottle is sufficient reason for classing the milk as adulterated and for prosecuting the dealer for violation of the pure food law.

## MILKS—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Per Cent Fat.	Remarks.
11525	Wm. Mayer	Indianapolis.	2.9	Skimmed.
12777	Brookmeyer & Son	Goshen.	2.9	Skimmed.
12777	Loren P. Moore	Kokomo.	4.8	Very dirty.
12779	Cyrus Carter	Kokomo.	4.6	Very dirty.
12780	James A. Newton	Kokomo.	4.4	Sand present.
12776	Wm. E. Parsons	Kokomo.	4.4	Sand and dust present.
13359	Geo. Steiner	Jeffersonville.	3.2	20% added water.
13390	J. C. Steiner	Jeffersonville.	2.8	23% added water.
13617	Mrs. Dodge	Indianapolis.	2.0	Cream poured off.
13689	Mike Spomer	Hammond.	4.3	Very dirty.
13690	Mike Spomer	Hammond.	3.4	Very dirty.
13694	Geo. Andres	Hammond.	3.5	Very dirty.
13695	L. Elster	Hammond.	3.4	Very dirty.
13698	E. Fruehling	Hammond.	3.1	Below standard.
13709	A. Schneider	Gary.	3.2	Below standard.
13711	Theo. Heiney	Toletton.	3.0	10% added water.
14557	Rand Bros.	Indianapolis.	3.4	Dirty.
14567	Ira Hoe	Mishawaka.	3.4	Dirty.
14591	Desua Kerhoert	Mishawaka.	3.4	5% added water.
14592	John Huenner	Mishawaka.	3.3	Very dirty.
14621	Harry McGrain	Corydon.	2.7	Skimmed.
14684	E. E. McFerran	Bloomington.	2.6	Skimmed.
14687	A. C. Coyle	Bloomington.	2.2	Skimmed.
14689	Henry & Kerr	Bloomington.	1.8	Skimmed.
14696	M. D. Wells	Bloomington.	0.7	Skimmed.
14734	Jno. E. Worrell	Jeffersonville.	3.0	10% added water.
14786	Herman Becker	Jeffersonville.	3.1	Skimmed.
14790	Chris. Meyer	Jeffersonville.	3.8	Dirty.
14792	John Stemler	Jeffersonville.	3.0	Skimmed.
14793	Wm. H. Dames	Jeffersonville.	3.8	Dirty.
14926	Fred. W. Trowman	South Bend.	2.5	Skimmed.
14930	W. E. Rentschler	South Bend.	2.4	Skimmed.
15054	Louis Carthausen	Indianapolis.	3.0	Below standard.
15094	John H. Hile	Logansport.	3.0	Below standard.
15097	Harry Nicodemus	Logansport.	3.0	Below standard.
15098	W. R. Cogley	Logansport.	3.1	Below standard.
15125	Hedrick & Mackenhosk	Indianapolis.	3.0	Watered 10%.
15126	Ambrose Andrews	Indianapolis.	3.0	Skimmed.
15129	George Smith	Indianapolis.	3.2	Watered.
15130	Henry Arnholters	Indianapolis.	2.9	Skimmed.
15131	Bert. N. Ray	Indianapolis.	3.0	Skimmed.
15132	Hammoul & Pasquire	Indianapolis.	2.4	Skimmed.
15129	J. C. Madden	Mishawaka.	3.1	Skimmed.
15154	Nora Sutton	French Lick.	3.0	Skimmed.
15155	Willard Campbell	French Lick.	3.1	Skimmed.
15200	F. H. Turner	Paoli.	2.6	Below standard.
15203	Willard Campbell	French Lick.	2.6	Below standard.
15212	Frank J. Roell	Batesville.	3.0	15% water.
15318	Laughlin & Coffey	Bloomfield.	2.4	Skimmed.
15333	Chas. Prange	Pt. Wayne.	2.6	Skimmed.
15336	G. Stimmel	Pt. Wayne.	3.0	Skimmed.
15338	Pointsett & Trick	Pt. Wayne.	3.0	Below standard.
15451	P. E. Jones	Peru.	3.1	Skimmed.
15453	Max Breult	Peru.	3.1	Skimmed.
15539	C. M. Austin	Muncie.	3.8	Dirty.
15543	S. Draton	Muncie.	4.5	Very dirty.
15544	A. D. King	Muncie.	5.2	Very dirty.
15553	A. C. Ayres (sent in)	Brownsville.	2.8	Below standard.
15589	Paul Deardroff	Kokomo.	4.9	Very dirty.
15639	Steve Senechack	Whiting.	3.0	Very dirty.
15642	C. Stewart	Whiting.	3.1	14% added water.
15236	Sanitary Milk Co.	Peru.	2.6	Skimmed.
16073	Sanitary Milk Co.	Peru.	2.5	20% added water.
14816	F. L. Kreutz	Mishawaka.	2.6	Skimmed.
14764	John S. Payne	New Albany.	2.0	8% added water.

## CREAM.

Standard cream must contain 18 per cent. butter fat. Of the 38 samples analyzed, 12, or 31.5, were below standard and illegal. No adulterant, such as gelatine or viscogen, was detected.

## CREAM—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Per Cent Fat.	Remarks.
13733	L. D. Fines	Muncie.	22.0	Dirty.
14016	Fred Glass	Madison.	14.2	Below standard.
14771	John A. Weaver	New Albany.	18.8	Dirty.
15119	J. L. Miller	Bedford.	14.0	Below standard.
15385	Minor Conner	Connersville.	15.0	Below standard.
15398	George Cain	Connersville.	14.0	Below standard.
15534	Petig & Berryhill	Lebanon.	14.1	Below standard.
15537	James McNamara	Whiting.	12.0	Below standard.
15643	C. Stewart	Whiting.	15.6	Below standard.
15744	H. O. Goodlander	Walsh.	17.4	Below standard.
16072	Sanitary Milk Co.	Peru.	14.0	Below standard.

## MILK PRODUCTS.

## CONDENSED MILK.

Of the 13 samples of condensed milk analyzed, 6 were legal and 7 were illegal, being low in butter fat and solid content. The character of condensed milk has not improved during the last year. If the manufacturer and the jobbers are to be believed, the public taste has so changed that it demands a milk both fluid and free from any fat separation to such a point that because of low solid and fat content the milk is very inferior in food value to the product formerly manufactured.

## BUTTER.

Seventy-four samples of butter were analyzed during the period. Fifty-nine of these samples were pure and 15, or 20.2 per cent., were illegal either because of the presence of an excessive amount of water or the admixture or substitution of oleomargarine. The moisture content of legal butter must not exceed 16 per cent. Under the internal revenue laws butter containing more than 16 per cent. of moisture is classed as adulterated butter, and can only be manufactured when the purchaser holds a government license and pays a tax upon his product. The small butter maker who keeps four or five cows, who has no ice and who frequently does not know how to make good butter, very commonly during hot weather produces a butter which is illegal because it contains too much water. This adulteration is no doubt unintentional, but it is none the less illegal, first because the consumer pays for water instead of butter, and second because this low grade article is an unfair competitor of standard butters.

## BUTTER—LEGAL.

Lab. No.	Retailer.	Collected.	Butyro. @40°C.	Reichert-Meissl Number.	Moisture.
13523	A. Sagemeir	Indianapolis.	42.7	28.70	11.16
13524	Mrs. H. Freiberg	Indianapolis.	42.2	28.70	12.29
13571	C. E. Gresham	Knox.	42.2	23.74	13.37
13577	Bishop Grocery Co.	Buchanan, Mich.	42.0	28.14	12.60
13578	W. J. Witthelm	Knox.	41.5	25.40	12.00
13659	W. H. Hart	Albion.	41.8	26.56	11.16
13670	Guy Hardenbrook	Albion.	42.2	29.78	9.84
13703	Geo. P. Betts	Milford.	41.1	27.98	
13812	Treiferger Gro. Co.	Pt. Wayne.	42.7	29.41	9.83
13813	Brinkrogers	Pt. Wayne.	41.5	28.54	13.32
13814	Coverdale & Archer	Pt. Wayne.	42.2	28.20	14.51
13815	James H. Eaken	Pt. Wayne.	42.5	28.50	13.68
13816	Gets. Sharp & Orr	Pt. Wayne.	42.3	28.21	12.55
13817	Mensch	Pt. Wayne.	41.1	33.21	9.12
13818	Joseph Oddon	Pt. Wayne.	41.7	26.37	12.48
13819	234 E. Columbia St.	Pt. Wayne.	43.5	29.25	15.25
13820	J. J. Reed	Pt. Wayne.	42.2	30.03	15.50
13821	Current Grocery	Pt. Wayne.	41.4	25.03	12.98
13822	Wm. Doehrmann	Pt. Wayne.	42.3	23.98	11.16
13823	Lehnst Gebler	Pt. Wayne.	42.6	29.91	8.91
13824	Hegerfeldt	Pt. Wayne.	43.3	24.45	9.42
13825	G. E. Spiegle	Pt. Wayne.	41.1	30.95	9.48
13826	August Korn	Pt. Wayne.	42.9	22.22	14.46
13827	John Schmidt	Pt. Wayne.	43.1	28.80	12.68
13828	C. H. Buck	Pt. Wayne.	42.8	29.28	13.12
13829	G. Hitzemann	Pt. Wayne.	42.4	27.90	10.80
13963	E. S. Nauce	Brasil.	41.0	28.90	
14031	Shore & Wilson	Rochester.	42.2	25.61	9.44
14032	L. P. Conner	Rochester.	42.0	28.50	11.52
14039	J. T. Liston	Rochester.	43.1	28.50	12.93
14425	Dr. F. M. Payne	Princeton.	42.0	28.83	
14816	H. O. Bruggema	Pt. Wayne.	42.3	24.48	
14832	Groff Bros.	Mishawaka.	43.4	32.60	
14833	Groff Bros.	Mishawaka.	40.8	23.07	
14839	Cotton & Thalbermar.	Mishawaka.	43.3	26.98	
14940	Cotton & Thalbermar.	Mishawaka.	43.2	24.93	
15023	Perkins	Cannel.	43.0	25.07	
15113	John T. Willett	South Bend.	44.4	23.75	
15181	Fred Neuman	Indianapolis.	42.8		
15352	Bartlett Tea Co.	Indianapolis.	43.2	26.90	
15394	John T. Willett	South Bend.	42.3		
15658	Internal Revenue Bureau	Indianapolis.	44.5		
15659	Internal Revenue Bureau	Indianapolis.	42.7		
15660	Internal Revenue Bureau	Indianapolis.	44.3		
15661	Internal Revenue Bureau	Indianapolis.	44.5		
15706	F. H. Elliott	Carmel.			13.78
15799	Mrs. John M. Folz	Ben Davis.			14.70
15800	Mrs. John M. Folz	Ben Davis.			11.40
15801	Crear Huffman	Ben Davis.			15.00
15802	Lady Scott	Whitewater.			12.08
15803	S. W. McPhrain	Whitewater.			15.66
15809	Mary E. Ross	Plainfield.			14.40
15811	E. Newby	Westfield.			14.10
15837	Charles Rime	Indianapolis.			9.40
16043	J. C. Shelburn	Zionsville.			13.20
16051	W. H. King	Lebanon.			14.30
16052	L. O. Shank	West Newton.			9.81
16106	S. A. Plummer	West Newton.			9.69

## BUTTER—ILLEGAL.

Lab. No.	Retailer.	Collected.	Buty ro (@40°C)	Reichert- Meisel Number.	Moisture	Remarks.
13675	Delicatessen Co.	Elkhart	49.9	4.22		Oleo.
13708	Dr. C. C. McIntosh	Terre Haute	44.3			Mixed.
14815	Mr. White	Attorney Gen.'s Office	49.0			Oleo.
15682	Henry Levy	State House	43.0		26.0	Adulterated.
16314	S. A. Plummer	West Newton			17.93	Adulterated.
14911	Internal Revenue Bureau	Indianapolis	50.3			Oleo.
14912	Internal Revenue Bureau	Indianapolis	50.3			Oleo.
14913	Internal Revenue Bureau	Indianapolis	49.0			Oleo.
14914	Internal Revenue Bureau	Indianapolis	49.0			Oleo.
14915	Internal Revenue Bureau	Indianapolis	48.5			Oleo.
14916	Internal Revenue Bureau	Indianapolis	48.3			Oleo.
14917	Internal Revenue Bureau	Indianapolis	50.2			Oleo.
14918	Internal Revenue Bureau	Indianapolis	48.3			Oleo.
14919	Internal Revenue Bureau	Indianapolis	50.0			Oleo.
15930	Internal Revenue Bureau	Indianapolis	48.5			Oleo.

## ICE-CREAM.

Of the 181 samples of ice-cream analyzed, 111 were pure and 70, or 38.6 per cent., were illegal. The adulteration commonly noted consisted of an insufficient amount of butter fat. The standard for ice-cream requires 8 per cent. of butter fat to be present. Many manufacturers apparently are not satisfied to conform to this standard, and substitute in their formulas condensed, skimmed or whole milks in such quantities that the finished product contains from 2 to 4 per cent. less butter fat than should be present.

## ICE CREAMS—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Per Cent. Fat.
13904	E. H. Hallett	Princeton	13.6
13909	Hassel & Son	Princeton	8.0
14014	Frank Senfelter	Madison	18.4
14624	H. H. Rosenberger	Corydon	15.2
14626	Geo. Feller	Corydon	13.6
14649	Furnas Ice Cream Co.	Indianapolis	9.6
14711	Coppes Pharmacy	Nappanee	9.8
14765	Steele & Shaw	New Albany	8.0
14772	George Goodhub	New Albany	13.2
14773	John Haffen	New Albany	10.4
14827	Klein Candy Co.	Mishawaka	10.8
14832	C. H. Jones	Washington	11.2
14833	Sunn Bros.	Washington	9.2
14928	W. B. Hollingsworth	South Bend	12.0
14939	F. E. Tewsbury	South Bend	8.2
14941	E. Poljar	South Bend	8.0
14942	John R. Noble	South Bend	11.4
14943	New York Candy Kitchen	South Bend	11.4
14944	Nardi & Co.	South Bend	12.0
15019	Philadelphia	South Bend	14.0
15020	Philadelphia	South Bend	13.6
15117	J. D. Sears	Bedford	10.6
15134	Jno. J. Mitchell	Bedford	10.8
15135	Ort Drug Store	Bedford	8.0
15136	F. H. Turner	Bedford	8.0
15157	Hilkey Bros.	French Lick	8.0
15158	Hilkey Dairy	French Lick	11.8
15161	W. W. Sloan	French Lick	10.0
15166	John W. Whittier (sent in)	South Bend	8.8
15167	E. W. Burns (sent in)	South Bend	9.2
15168	Ward & Co. (sent in)	South Bend	15.2
15169	New York Candy Co. (Sent in)	South Bend	12.0
15169	John Noble (sent in)	South Bend	12.0
15171	Dreyer Candy Shop (sent in)	South Bend	15.2
15172	Mrs. L. Brooks (sent in)	South Bend	9.2
15173	Mrs. J. L. Turner (sent in)	South Bend	8.0
15197	Harry Ritter	West Baden	8.0
15217	Ed. Blank	Batesville	12.2
15247	Cushman Bros.	Frankfort	10.0
15248	Richard Green	Lebanon	8.0
15249	P. B. Powell	Lebanon	8.0
15250	Furnas Ice Cream Co.	Indianapolis	8.0
15251	Wimborough & Ackerman	Lebanon	9.2
15252	A. B. Jones	Lebanon	10.0
15253	Petrie & Berryhill	Lebanon	12.4
15254	Lebanon Cream Co.	Lebanon	10.8
15296	J. F. Donwer & Son	Elmora	10.8
15308	Jessup & Anttrim	Indianapolis	8.6
15311	E. C. Wilkinson	Worthington	8.2
15314	Frois & Osborn	Worthington	9.0
15339	Ft. Wayne Dairy Co.	Ft. Wayne	9.6
15340	Geo. T. Pantaxin	Ft. Wayne	8.6
15341	Collins & Co.	Huntington	10.0
15343	A. C. Aurentz	Ft. Wayne	13.2
15346	W. S. Giller	Ft. Wayne	10.0
15386	H. L. Frost	Connersville	9.6
15425	Vincennes Cond. Milk	Vincennes	8.4
15430	Greek Candy Kitchen	Vincennes	12.0
15431	Flanke Bros.	Vincennes	13.6
15432	Cassel & Son	Vincennes	10.8
15463	N. Jenseny	Clay City	9.6
15486	J. S. Harris	Spencer	8.0
15467	B. C. Larimore	Spencer	9.2

## ICE CREAMS—LEGAL—Continued.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Per Cent. Fat.
15495	John W. Stairwolf	Worthington	9.0
15496	Davis & Osborn	Terre Haute	9.6
15497	E. C. Wilkins	Worthington	8.8
15531	Benks & Roth	Worthington	6.0
15616	R. Nutini	Whiting	8.8
15646	Whiting Candy Kitchen	Whiting	8.8
15647	Worchhills (Manufacturer)	Hammond	8.0
15648	R. Nutini	Whiting	10.8
15698	Geo. Chopera	Anderson	8.0
15699	Geo. H. King	Anderson	8.0
15706	M. Zimmerman	Ft. Wayne	8.8
15708	Collins Ice Cream Co.	Ft. Wayne	13.2
15713	W. F. Geller	Ft. Wayne	9.4
15714	C. O. Lepper	Ft. Wayne	8.0
15715	J. C. Aurent	Ft. Wayne	15.0
15737	James Dickman	Peru	15.0
15738	Chas. Buelder	Peru	10.0
15740	R. E. Clark	Wabash	8.0
15741	Bradley Bros	Wabash	8.0
15746	Gaylord & Barnbauer	Wabash	16.0
15847	Wm. Newman	Wabash	11.4
15848	Wm. F. Verfus	Williamsport	8.3
15940	Pitcher Bros.	Williamsport	10.0
15988	Corporan & Jonquetta	Mishawaka	11.4
15989	Falrie & Rosie	Mishawaka	13.4
15971	S. H. Wallace	Veedersburg	8.5
15974	J. F. Sullivan	Veedersburg	10.4
15985	J. F. Kellner	Covington	10.8
15997	J. A. Treevebaugh	Crawfordsville	8.8
15999	J. C. Wampler	Crawfordsville	10.0
16040	Crane Brothers	Frankfort	8.0
16241	Ben Houecker	Darlington	9.6
16042	Mrs. B. F. Thurston	Darlington	14.0
16074	Wm. Newman	Wabash	8.4
16075	Gaylord & Barnbauer	Wabash	16.4
16077	R. E. Clark	Wabash	8.0
16078	Geo. Dernos	Wabash	17.6
16281	Thomas Best	Ft. Wayne	15.0
16084	Anna Overhulser	Ft. Wayne	9.2
16085	Walker & Murray	Zanesville	8.8
16086	Ft. Wayne Dairy Co.	Ft. Wayne	8.2
16087	C. E. Woodworth	Ft. Wayne	9.6
16088	Ft. Wayne Dairy Co.	Ft. Wayne	17.6
16089	A. C. Aurentz	Ft. Wayne	14.4
16091	W. F. Geller	Ft. Wayne	10.6
15584	Sanitary Ice Cream Co.	Kokomo	11.0

## ICE CREAM—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Per Cent. Fat.	Remarks.
E1936	W. F. Crook	Worthington		Below standard
E1748	Laughlin & Coffee	Worthington		Below standard
11736	Pearl Ice Cream Co.	Terre Haute	6.0	Below standard
14688	Geo. Poulisten	Bloomington	4.2	Below standard
14729	Wm. A. Garrison	Bedford	5.2	Below standard
14731	J. L. Miller	Bedford	4.4	Below standard
14743	O. P. Mathew	Mitchell	5.0	Below standard
14828	Ferreter & Co	Mishawaka	5.0	Below standard
14829	Corporan & Janquet	Mishawaka	6.8	Below standard
14855	Smoot Bros	Washington	6.0	Below standard
15024	H. H. Warner	Linton	4.8	Below standard
15088	J. E. Allen	Bedford	6.4	Below standard
15088	A. Wood	Mitchell	4.4	Below standard
15089	J. D. Sears	Bedford	6.4	Below standard
15164	J. L. Miller	Bedford	7.0	Below standard
15165	W. B. Hollingsworth	South Bend	6.8	Below standard
15202	Geo. B. Lee	French Lick	4.0	Below standard
15216	Jacob Engle	Batesville	7.2	Below standard
15215	Frank W. Gehring	Batesville	2.8	Below standard
15305	A. Effinger	Elmora	4.2	Below standard
15307	W. F. Crook	Worthington	6.0	Below standard
15310	Buiks & Roth	Worthington	7.4	Below standard
15319	Laughlin & Coffee	Bloomfield	4.8	Below standard
15330	H. V. Strope	Bloomfield	7.6	Below standard
15342	White Fruit House	Ft. Wayne	6.4	Below standard
15428	Mary Duestirbey	Knox	8.1	Below standard
15429	Rumer & Son	Vincennes	6.7	Below standard
15457	Exmeyer Ice Cream	Peru	4.8	Below standard
15458	Howard & Son	Peru	4.2	Below standard
15494	John C. Dudley	Spencer	6.6	Below standard
15468	Jas. R. Layman	Spencer	6.5	Below standard
15494	W. F. Crook	Worthington	5.6	Below standard
15526	Ellis G. Hooper	Bicknell	7.6	Below standard
15529	Hollingsworth & Howard	Bicknell	6.8	Below standard
15530	R. N. File	Bicknell	6.0	Below standard
15545	Nick Harman	Muncie	7.2	Below standard
15559	Plappins Pharmacy	Indianapolis	6.4	Below standard
15561	Cudworth Confectionery	Indianapolis	6.4	Below standard
15562	Merrill's Pharmacy	Indianapolis	6.4	Below standard
15563	Cudworth's Confectionery	Indianapolis	6.4	Below standard
15565	Jessup & Anttrim	Indianapolis	7.2	Below standard
15572	A. E. Deardorff	Kokomo	6.0	Below standard
15597	O. C. & W. E. Warick	Danville	5.8	Below standard
15598	O. C. & W. E. Warick	Danville	6.0	Below standard
15632	J. C. Krensch	Anderson	6.4	Below standard
15634	J. C. Krensch	Anderson	4.2	Below standard
15663	Krusel Ice Cream Co	Anderson	7.0	Below standard

## ICE CREAM—ILLEGAL—Continued.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Per Cent. Fat.	Remarks.
15664	Kreusel Ice Cream Co.	Anderson.	5.8	Below standard.
15667	J. C. Kreusch.	Anderson.	6.0	Below standard.
15709	J. C. Kreusch.	Anderson.	6.0	Below standard.
15701	J. C. Kreusch.	Anderson.	6.0	Below standard.
15702	W. H. Lagel.	Anderson.	3.2	Below standard.
15707	Ft. Wayne Dairy Co.	Ft. Wayne.	7.8	Below standard.
15716	A. C. Aurentz.	Ft. Wayne.	7.8	Below standard.
15739	Gaylord & Baumbauer.	Wabash.	5.6	Below standard.
15745	Wm. Newman.	Wabash.	7.6	Below standard.
15750	Delphi Ice Cream Co.	Delphi.	6.8	Below standard.
15752	Harry L. Sharp.	Delphi.	6.8	Below standard.
15921	— "Howard.	Culter.	5.0	Below standard.
15947	Wm. Collins.	Danville.	5.6	Below standard.
15970	H. Sanger.	Veedsburg.	7.4	Below standard.
15973	G. G. Graham.	Veedsburg.	7.0	Below standard.
15986	C. W. Reeves.	Crawfordsville.	6.6	Below standard.
15998	C. J. Reiman.	Crawfordsville.	4.8	Below standard.
16076	Bradley Bros.	Wabash.	4.2	Below standard.
16082	Hartell.	Ft. Wayne.	6.8	Below standard.
16083	C. P. Wise.	Ft. Wayne.	7.0	Below standard.
16090	Hartman Pharmacy.	Ft. Wayne.	6.8	Below standard.
16164	A. C. Coyle.	Bloomington.	6.0	Below standard.

## MEAT PRODUCTS.

Of the 212 samples of meat analyzed during the past seven months, 63 were legal and 149, or 70.2 per cent., were illegal. The most common adulteration noted was starch, which was employed in greater or less quantities by sausage manufacturers. The practice of adding starch to cheap meats has grown to large proportions within the last few years. The explanation given for its use is that sausage containing it can be stuffed into skins more readily and that the sausage cooks better and is more palatable. Another reason no doubt for its use, and one which explains the practice, is that by employing it considerable quantities of water may be incorporated with the meat, thus producing a sausage at a decidedly lower cost than if it were made from meat and spices alone. There can be no valid objection to the addition of flour to the sausage if the purchaser is advised of the fact that he is getting a cereal product, and the sale of sausage labeled "Sausage with cereal added" is in conformity with the law.

## BOLOGNA—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Remarks.
13837	Court House Grocery.	Indianapolis.	Starch present.
13838	John F. Concanon.	Indianapolis.	Starch present.
13848	Louis Yorgor.	Indianapolis.	Starch present.
13851	H. Merklin.	Indianapolis.	Starch present.
14095	L. P. Conner.	Rochester.	Starch present.

## HAMBURGER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.
13831	Frank Schissler.	Indianapolis.
13847	E. Reynolds.	Indianapolis.
13853	H. L. Dorman.	Indianapolis.
13853	Frank A. Uhl.	Indianapolis.
13855	C. Cook.	Indianapolis.
13857	Frank Overman.	Indianapolis.
13858	Hornee Boston.	Indianapolis.
13872	J. Schisk.	Indianapolis.
13879	Walter Williams.	Indianapolis.
13900	H. C. Redman.	Indianapolis.
13923	Walter Williams.	Indianapolis.
13972	Frank W. Hebble.	Indianapolis.
13977	Jacob Schull.	Indianapolis.
14050	Wm. Kuhn.	Hammond.
14053	G. C. Austgen.	Hammond.
14063	Fred Kunzman.	Hammond.
14084	Louis Nelp.	Peru.
14088	McCaffrey & Co.	Peru.
14093	L. P. Conner.	Rochester.
14517	H. J. Rayburn.	Converse.
14569	Buchler Bros.	South Bend.
14569	G. E. Barnett.	South Bend.
14572	J. Colliard.	South Bend.
14580	H. L. Kirkwood.	Mishawaka.
14584	Fred Stockinger.	Mishawaka.
14686	Ben S. Rodgers.	Bloomington.

## HAMBURGER—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Remarks.
13928	L. P. Conner.	Rochester.	Sulphites present.
14033	L. P. Conner.	Rochester.	Sulphites present.
14058	J. L. Humpler Co.	Hammond.	Sulphites present.
14060	Chas. Berendt.	Hammond.	Sulphites present.
14566	Rohrer.	South Bend.	Sulphurous acid present.
14573	J. P. Rosplachski.	South Bend.	Sulphurous acid present.
14578	F. A. Weber.	Mishawaka.	Sulphurous acid present.
14582	Peter Brunet.	Mishawaka.	Sulphurous acid present.
13730	Louis Jung.	Indianapolis.	Sulphites present.

## SAUSAGE—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.
13776	Hoffer's Meat Market.	Muncie.
13842	Pat. Martin.	Indianapolis.
13843	Brown Bros.	Indianapolis.
13851	Louis Yorgor.	Indianapolis.
13854	H. L. Dorman.	Indianapolis.
13855	C. Cook.	Indianapolis.
13869	Hornee Boston.	Indianapolis.
13870	H. Voliroth.	Indianapolis.
13871	A. Gibson.	Indianapolis.
13889	H. C. Redman.	Princeton.
13933	Hilgenmeier & Bros.	Indianapolis.
13940	Chas. Bauer.	Indianapolis.
13941	Chas. Gardner.	Indianapolis.
13969	Carbill Bros.	Indianapolis.
13970	A. W. Berryhill.	Indianapolis.
13971	Frank Herbie.	Indianapolis.
13976	Jacob Schull.	Princeton.
14051	Wm. Kuhn.	Hammond.
14055	Noach & Du Combe.	Hammond.
14061	Chas. Berendt.	Hammond.
14063	Fred Kunzman.	Hammond.
14068	J. Eizelsback.	Rensselaer.
14070	T. B. Ham.	Rensselaer.
14082	O. J. Tillett.	Peru.
14083	Louis Nelp.	Peru.
14087	J. W. Miller.	Peru.
14089	McCaffrey & Co.	Peru.
14518	H. J. Rayburn.	Converse.

## SAUSAGE—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Remarks.
13829	Frank Schissler.	Indianapolis.	Starch present.
13958	Herman Merklin.	Indianapolis.	Starch present.
13962	Herman Merklin.	Indianapolis.	Starch present.
13976	Johnson Grocery Co.	Indianapolis.	Starch present.
13877	F. Schusseler.	Indianapolis.	Starch present.
13882	Louis Jung.	Indianapolis.	Starch present.
13883	A. Moldthun.	Indianapolis.	Starch present.
13885	P. Hilgenmeier.	Indianapolis.	Starch present.
13886	P. Hilgenmeier.	Indianapolis.	Starch present.
13902	C. W. Covey.	Princeton.	Starch present.
13908	F. W. Bowman.	Indianapolis.	Starch present.
13978	C. W. Covey.	Princeton.	Starch present.
14034	L. P. Conner.	Rochester.	Starch present.
14059	J. L. Humpler Co.	Hammond.	Sulphites present.
14072	Roth Bros.	Rensselaer.	Starch present.
14090	C. W. Yoder.	Rochester.	Starch present.
14091	C. F. Taylor.	Rochester.	Starch present.
14094	L. P. Conner.	Rochester.	Starch present.
14570	G. E. Barnett.	South Bend.	Sulphites present.
14571	James Colliard.	South Bend.	Starch present.
14574	C. O. McCarty.	South Bend.	Sulphites present.
14576	C. O. McCarty.	South Bend.	Starch present.
14587	Buchler Bros.	South Bend.	Starch present.
14583	Peter Brunet.	Mishawaka.	Sulphites present.
14585	Fred Stockinger.	Mishawaka.	Starch present.
14630	Geo. E. Brown.	Corydon.	Starch present.
14685	B. S. Rodgers.	Bloomington.	Starch present.
14737	John Pesiev.	Hedford.	Starch present.
14854	C. G. Stimmo.	Washington.	Starch present.
14861	Henry Stimpf.	Washington.	Starch present.

## LIVERWURST—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Remarks.
13830	Frank Schissler.	Indianapolis.	Pure.
13841	John F. Concanon.	Indianapolis.	Pure.
14064	Fred Kunzman.	Hammond.	Pure.

## LIVERWURST—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Remarks.
13857	F. Hilgenmeier.	Indianapolis.	Starch present.
13854	Bills & Boettcher.	Indianapolis.	Starch present.

## WEINERWURST—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Remarks.
13839	Jno. F. Cocannoon	Indianapolis	Pure.
13840	Jno. F. Cocannoon	Indianapolis	Pure.
13845	E. Reynolds	Indianapolis	Pure.
14052	Wm. Kuhn	Hammond	Pure.
14056	Noach & Du Combe	Hammond	Pure.
14069	J. Engelsback	Rensselaer	Pure.

## WEINERWURST—ILLEGAL.

13833	Bills & Boettcher	Indianapolis	Starch present.
13834	Court House Grocery	Indianapolis	Starch present.
13835	Court House Grocery	Indianapolis	Starch present.
13836	Louis Yorger	Indianapolis	Starch present.
13837	Louis Yorger	Indianapolis	Starch present.
13838	F. Hilgemeier	Indianapolis	Starch present.
13839	H. Merklin	Indianapolis	Starch present.
13840	H. Merklin	Indianapolis	Starch present.
13878	H. Steck	Indianapolis	Starch present.
13884	A. Muthman	Indianapolis	Starch present.
14092	C. W. Yeiler	Rochester	Starch present.
14579	Frank Major	Mishawaka	Starch present.
14581	Major Bros.	Mishawaka	Starch present.

## LARD—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Butyro Reading, @40°C.	Cotton-seed Oil.	Beef Fat.
13723	J. C. Hinton	Fl. Wayne	51.5	None	None
13846	E. Reynolds	Indianapolis	50.7	None	None
13852	Louis Yorger	Indianapolis	50.15	None	None
13880	Walter Williams	Indianapolis	50.15	None	None
13903	Eanis & White	Princeton	50.5	None	None
13905	H. E. Redmon	Princeton	52.0	None	None
13907	C. W. Covey	Princeton	51.25	None	None
14552	Gus Keshner	Lawrenceburg	50.3	None	None
14023	W. H. Kellar & Co.	Corydon	50.15	None	None
14025	Corydon Packing Co.	Corydon	50.2	None	None
14630	Geo. E. Brown	Corydon	50.2	None	None
14635	Wm. Hilsmeier	Huntingburg	49.1	None	None
14640	F. L. Lankin	Huntingburg	48.9	None	None
14648	Heisk & Eggers	Huntingburg	50.6	None	None
14857	C. G. Stumpp	Washington	51.0	None	None
14893	H. J. Kramer	Washington	51.5	None	None
14865	C. J. Berrens	Washington	51.6	None	None
15162	Smith, Wells & Cave	French Lick	50.2	None	None
15164	Livinsgood & Browning	French Lick	49.3	None	None
15204	Reller & Wilson	West Baden	50.2	None	None
15208	J. A. Feltner	West Baden	50.7	None	None
15340	Scott & Cain	Sandborn		None	None

## LARD—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Butyro Reading, @40°C.	Cotton-seed Oil.	Beef Fat.	Remarks.
13844	Brown Bros.	Indianapolis	50.2	15%	Present	Adulterated.
13875	Frank Schissler	Indianapolis	51.65	15%	Present	Adulterated.
14884	W. O. Stumpp	Washington	49.0	None	Present	Adulterated.
15589	Hibbin, Holloway & Co.	Indianapolis	49.2	None	Present	Adulterated.

## MISCELLANEOUS MEAT PRODUCTS—LEGAL.

Lab. No.	Article Analyzed.	Manufacturer or Retailer.	Where Collected.	Remarks.
13864	Veal loaf	Chas. Girble	Indianapolis	
14062	Dried beef	Chas. Berendt	Hammond	
14074	Corned beef	Roth Bros.	Rensselaer	
14083	Veal loaf	O. J. Tillett	Peru	
14503	Red salmon	Best Bros.	Jeffersonville	
14575	Dried beef	C. O. McCarty	South Bend	
14933	Pressed ham	Cotton & Thalbemar	Mishawaka	
14957	Pork and beans	W. E. Musser	Freedom	

## MISCELLANEOUS MEAT PRODUCTS—ILLEGAL.

13855	Bloodwurst	F. Hilgemeier	Indianapolis	Starch present.
14073	Head cheese	Roth Bros.	Rensselaer	Starch present.
14096	Luncheon beef	L. P. Connor	Rochester	Starch present.
14545	Corned beef hash	Mooney	Terre Haute	Starch present.
14942	Minced ham	Cotton & Thalbemar	Mishawaka	Starch present.
15627	Meat	J. M. Atkinson, M. D.	Eaton	Strychnia present.

## OYSTERS—ILLEGAL.

Lab. No.	Retailer.	Where Collected.	Number Oysters Per Doz.	Gross Weight, Grams.	Weight of Meat, Grams.	Per Cent of Water in Meat.	Per Cent of Solids in Meat.	Weight of Liquor.	Per Cent. Water in Liquor.	Per Cent. Solids in Liquor.	Per Cent. Water in Sample.	Per Cent. Meat in Sample.	Total Solids in Sample.	Per Cent. Solids in Sample.	Remarks.
13932	Geo. Sowder	Market House	61	475	375	89.16	10.84	100 c.c.	98.12	1.87	20.05	79.95	42.49	8.945	Adulterated with water and prosecuted.
13933	Mrs. T. J. Egan	Market House	33	470	385	9.231	7.69	105	98.72	1.271	22.34	77.66	29.40	6.235	Adulterated and prosecuted.
13934	Indianapolis Fish and Oyster Co.	Indianapolis	54	500	387	96.86	13.14	133	99.91	3.09	26.80	73.4	52.3	1.047	Watered.
13935	Geo. A. Nicolson	Indianapolis	32	464	387	85.88	14.12	77	96.25	3.74	16.60	83.4	57.5	12.40	Pass.

## MAPLE PRODUCTS.

During the spring months many samples of maple sugar and syrup were analyzed, mostly at the request of producers of the

country product. It is interesting to know that of the 47 samples analyzed but 8 were adulterated. This is a striking contrast to previous years when a pure maple syrup was a rarity. The character of maple sugar is also decidedly improved.

## MAPLE SYRUP—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Polarization, Direct.	Polarization, Invert.	Per Cent. Sucrose.	Total Ash.	Insoluble Ash.	Soluble Ash.	Alkalinity of Ash, Soluble.	Alkalinity of Ash, Insoluble.	Per Cent. Water.	Head Number.
13757	Sent in by Dr. C. C. McIntosh.	Terre Haute.	+45.2	-20.	49.0	.82	.44	.38	56.0	40.0		
13758	Sent in by Louis Schulmeyer.	Indianapolis.	+61.6	-24.8	64.9	.74	.24	.50	48.0	38.0		
13777	Sent in by Wm. S. Beck.	Indianapolis.	+57.6	-19.6	50.4	.71	.33	.38	72.	44.		
13780	Sent in by Clyde Ritter.	Pleasant Lake.	+66.0	-21.0	65.9	.71	.30	.41	60.	44.		
13781	Sent in by E. W. McMillan.	Mooresville.	+53.2	-19.6	55.1	.74	.31	.43	68.	48.		
13785	Sent in by Mrs. Harry Miller.	Seymour.			55.7	.62	.23	.39	48.	60.		
13787	Sent in by Indianapolis Water Co.	Indianapolis.			42.1	.68	.21	.47	52.0	30.	33.17	
13789	Mrs. McIntosh.	Worthington.	+54.2	-18.6	55.29	.90	.31	.59	68.	68.	29.40	2.73
13796	O. P. Damer.	Clay City.	+52.2	-19.8	54.68	1.07	.52	.55	68.	100.	32.6	3.2
13797	M. S. Burger.	Clay City.	+54.4	-19.8	56.38	.90	.31	.59	84.	68.	31.25	2.7
13798	M. S. Burger.	Clay City.	+59.0	-19.8	59.55	.98	.37	.59	72.	88.	31.20	3.05
13799	Cooper & Hansford.	Worthington.	+79.2	-28.8	87.66	2.96	2.25	.71	20.	188.		3.48
13874	Collected by H. E. Bishop.	Indianapolis.			64.2	.73	.27	.46	56.	52.		
13924	Frank Hall.	Logansport.			56.3	.94	.24	.70	76.	60.	27.15	
13926	Dr. R. H. Elliott.	Connersville.			58.1	.95	.63	.32	52.	92.	29.54	
13922	Ralph Hill.	Delphi.	+60.	-20.0	61.23	.72	.23	.49	60.	57.	32.5	2.28
13933	Dr. W. A. Holloway.	Logansport.			45.8	.86	.45	.41	56.	74.	29.62	
13966	Frank Stone.	Indianapolis.	+58.8	-20.8	60.92	.93	.38	.55	72.	73.	34.45	2.68
14028	J. W. Miller.	Rochester.	+55.2	-19.2	56.94	.16	.04	.12	10.	18.	32.30	
14045	Stewart & Berry.	Logansport.	+50.8	-17.6	52.55	1.03	.42	.61	66.	98.	36.95	2.66
14046	Earl Ray.	Logansport.	+57.2	-18.8	58.16	.80	.38	.42	60.	86.	38.00	2.57
14047	Boergu Bros.	Logansport.	+45.0	-19.6	48.68	.73	.29	.44	54.	74.	35.60	2.28
14048	Boergu Bros.	Logansport.	+60.6	-20.0	61.69	.87	.19	.68	84.	60.	30.80	2.59
14049	J. H. Foley Co.	Logansport.	+59.2	-20.8	61.23	.51	.15	.36	72.	44.	30.20	2.13
14071	F. S. Rhodes.	Rensselaer.	+61.6	-20.8	63.06	.77	.35	.42	56.	73.	31.40	2.40
14075	Home Grocery Co.	Rensselaer.	+57.0	-18.6	57.66	.30	.32	.42	44.	72.	35.90	2.71
14519	W. W. Minor.	Converse.	+59.4	-20.8	61.39	.57	.20	.37	40.	56.	33.15	1.80
14529	Geo. B. Spicer.	Gosport.	+57.4	-20.0	58.78	.66	.18	.48	56.	48.	31.25	2.41
14530	Geo. B. Spicer.	Gosport.	+48.0	-18.0	50.13	1.01	.26	.75	70.	60.	34.50	2.65
14531	Geo. B. Spicer.	Gosport.	+46.0	-19.0	48.37	.79	.25	.54	56.	60.	32.09	2.44
14532	Smith Bros.	Gosport.	+44.2	-19.8	47.09	.75	.23	.52	52.	60.	31.55	2.33
14533	Smith Bros.	Gosport.	+50.0	-19.8	59.85	.81	.26	.55	68.	60.	31.60	2.89
14534	J. W. King.	Gosport.	+43.6	-17.0	46.03	1.02	.58	.44	60.	100.	43.50	3.18
14759	Geo. C. Davis.	Crawfordsville.	+61.2	-20.0	61.67	.67	.17	.50	56.	54.	32.15	2.05
14775	T. L. Carver.	Crawfordsville.	+54.2	-18.6	56.29	.77	.20	.57	64.	62.	32.40	2.40
14776	T. L. Carver.	Crawfordsville.	+57.2	-19.8	57.22	.71	.24	.47	62.	64.	35.80	2.55
14939	Chas. B. Austin.	Indianapolis.	+62.2	-20.8	63.60	.60	.28	.32	54.	56.		
15133	Brought in by H. E. Barnard.	Indianapolis.	+80.2	-20.8	82.65	1.37	.75	.62	80.	140.		
15151	Sent in by J. C. Smith.	Attica.				1.01	.52	.49	52.	104.		

## MAPLE SYRUP—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Polarization, Direct.	Polarization, Invert.	Sucrose.	Total Ash.	Ash Soluble.	Ash Insoluble.	Alkalinity of Ash, Soluble.	Alkalinity of Ash, Insoluble.	Per Cent. Water.	Head Number.	Remarks.
13783	Chas. Ritter.	Spencer.			59.3	.81	.72	.09	68.	32.			Adulterated.
13792	A. M. Peters (sent in).	Marion.			47.8	1.08	.72	.56	64.	20.	36.41		Adulterated.
13822	W. D. Huffman Co.	Indianapolis.			60.9	.55	.04	.01	0.0	4.0			Cane sugar syrup.
13927	S. J. Wilson.	Indianapolis.			34.5	.69	.30	.39	40.	78.	52.96		Adulterated.
13956	Dr. S. C. Newlin (sent in).	Anderson.			46.9	.77	.50	.27	64.	64.	37.73		Adulterated.
14614	W. D. Huffman.	Indianapolis.	+65.	-20.4	66.0	.03	.02	.01	.04	.00	31.8	.38	Only trace of maple.
14614	W. D. Huffman.	Indianapolis.	+65.8	-20.4	66.0	.03	.02	.01	.04	.04	31.0	.40	Contains only trace of maple.
14915	W. D. Huffman.	Indianapolis.	+65.8	-20.4	66.0	.03	.03	.00	.04	.00	31.3	.38	Contains only trace of maple.

## MAPLE SUGAR—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Polarization, Direct.	Polarization, Invert.	Sucrose.	Total Ash.	Ash Soluble.	Ash Insoluble.	Alkalinity of Ash, Soluble.	Alkalinity of Ash, Insoluble.	Per Cent. Water.	Head Number.	Remarks.
13299	Lat V. Oglesby.	La Porte.	+99.0	-33.2	92.6	.38	.35	.03	16.	16.			Labeled "Blended Sugar."
13319	Mrs. Miller.	Indianapolis.	+87.2	-22.4	88.47	1.16	.39	.77	104.	100.		2.34	Pure.
13937	Chas. Ruhsback.	Indianapolis.	+72.0	-22.0	71.94	2.08	.78	1.30	1.96	104.		3.20	Pure.
13973	David Sham.	Indianapolis.	+84.0	-28.0	83.02	1.06	.54	.48	92.	198.		2.84	Pure.
14527	David Sham.	Indianapolis.	+36.0	-15.0	38.74	.85	.46	.39	56.	82.	45.00	2.68	Pure.
14528	John Sath.	Gosport.	+53.2	-24.4	60.92	1.95	.71	1.24	68.	88.		2.99	Pure.
15510	Home Preserving Co.	Indianapolis.				1.06	.30	.67	52.	100.			Pure.

## MAPLE SUGAR—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Polarization, Direct.	Polarization, Invert.	Sucrose.	Total Ash.	Ash Soluble.	Ash Insoluble.	Alkalinity of Ash, Soluble.	Alkalinity of Ash, Insoluble.	Per Cent. Water.	Head Number.	Remarks.
13931	F. L. Forthofer.	Princeton.	+104.	-6.4	74.69	.15	.09	.07	16.	20.		.14	Adulterated.
13931	Riv. State Maple Sugar Co.	Boston.			73.3	.44	.21	.23	32.	56.			Adulterated.
13937	W. L. Doughty.	Kyana.	+64.0	-22.4	65.73	1.75	.84	.91	96.	140.		3.41	Low grade sugar.

## VINEGAR.

Eighty-five samples of vinegar were analyzed during the seven months, of which 58 were legal and 27 were illegal, thus showing an adulteration of 31.7 per cent. The vinegars classed as illegal

were usually so ranked because of the fact that they were low in acid, due either to immaturity or to intentional dilution. Occasionally samples come to market as cider vinegars when in fact they are only artificial. Most of such goods is manufactured in large business centers and shipped into the State in willful violation of the law.

## VINEGAR—LEGAL.

Lab. No.	Manufacturer or Retailer	Where Collected	Acidity.	Solids.	Ash.	Alkalinity of Ash.	Color.	Lead Acetate Precipitate.	Polarization.	Remarks.
11717	Cato Vinegar Co.	Cato, Mich.	4.03	2.613	220	24	Normal	Slight	+0.	
13295	E. R. Steele & Co.	Lagerange	4.27	2.087	311	28.0	Normal	Slight	—4	Pure cider.
13337	Geo. M. White	Lagerange	4.20	1.957	250	22.0	Normal	Slight	—6	Pure cider.
13311	Geo. B. Moore	Lagerange	3.76	1.908	304	36.0	Normal	Slight	—4	Pure cider.
13351	E. L. Mori	N. Manchester	4.70	232	050	2.0	Normal	Slight		Distilled.
13423	E. W. Crothers	Elkhart	4.12	1.434	305	27.0	C. W. C.	Heavy	+—0.	Mixed.
13357	Laurel C. Jones	Albion	4.05	2.180	330	32.0	Normal	Slight	+—0.	Pure cider
13778	Grocers' Supply Co.	Indianapolis	4.00	2.176	361	24.0	Normal	Medium	+—0.0	Pure cider
14527	Grocers' Supply Co.	Indianapolis	4.03	2.077	320	28.0	Normal	Heavy	+—0.	Pure cider.
14549	James McGrath	Lawrenceburg	4.97	2.712	394	22.0	Normal	Medium	+—0.	Pure cider.
14628	C. M. Miller	Corydon	4.16	2.807	442	20.6	Normal	Heavy	+—0.	Pure cider
14633	Wm. Hilsmeier	Huntingburg	4.29	358	034	6.00	Normal	None	+—0.	Distilled.
14641	H. H. Hilsmeier	Huntingburg	4.62	265	025	3.00	C. W. C.	None	+2.2	Distilled.
14642	H. H. Hilsmeier	Huntingburg	4.12	2.041	248	25.00	Normal	Very heavy	+—0.	Pure cider
14645	Louis Katterburg	Huntingburg	6.05	364	046	5.00	Normal	None	+1.4	Distilled.
14738	Crescent Grocery Co.	Bedford	4.16	1.824	440	33.0	Normal	Medium	+—0.	Pure cider
14739	Diamond Grocers Co.	Bedford	4.53	502	099	2.0	Normal	None	+2.0	Distilled.
14745	Irvine & Sons	Mitchell	4.395	2.472	347	28.0	Normal	Medium	—2.4	Pure cider
14748	J. F. Mathews	Mitchell	5.115	380	067	2.40	C. W. C.	None	+1.6	Distilled.
14751	John Dalton	Mitchell	4.17	412	054	6.00	C. W. C.	None	+1.2	Distilled.
14810	J. F. Crane	Spencer	4.03	5.052	464	40.0	Normal	Heavy	+—0.	Pure cider
14849	Grocers' Supply Co.	Indianapolis	3.77	2.28	343	28.0	Normal	Heavy	+—0.	Pure cider
15030	J. M. Zion	Clarks Hill	5.15	1.378						Pure cider
15031	J. M. Zion	Clarks Hill	6.20	1.242						Pure cider
15032	J. M. Zion	Clarks Hill	5.19	1.213						Immature
15033	J. M. Zion	Clarks Hill	5.18	1.448						Immature
15034	J. M. Zion	Clarks Hill	5.54	1.750						Immature
15035	J. M. Zion	Clarks Hill	5.82	1.442						Immature
15036	J. M. Zion	Clarks Hill	4.10	2.385						Immature
15037	J. M. Zion	Clarks Hill	5.02	1.362						Immature
15038	J. M. Zion	Clarks Hill	4.30	1.365						Immature
15039	J. M. Zion	Clarks Hill	6.06	1.338						Immature
15040	J. M. Zion	Clarks Hill	4.15	1.253						Immature.
15041	J. M. Zion	Clarks Hill	4.80	1.390						Immature.
15142	J. M. Zion	Clarks Hill	4.30	1.332						Immature.
15243	J. M. Zion	Clarks Hill	4.30	1.041						Immature.
15163	John D. Landis	Linton	4.54	5.474	117	14	Normal	Very heavy	—8.8	Cider vinegar
15217	J. A. Felkner	West Baden	5.04	2.531	481	28.0	Normal	Heavy	+—0.	Pure vinegar
15231	Wm. Deichmann	Fr. Wayne	4.73	2.651	438	38.0	Normal	Medium	—6	Pure vinegar
15281	Bloomington Vinegar Co.	Bloomington	3.73	2.633	432	28.	Normal	Heavy	+2.4	Pure vinegar
15151	Bartlett Tea Co.	Indianapolis	4.075	2.477	508	31.0	Normal	Heavy	—6	Pure vinegar.
15152	J. M. Berry	Ellettsville	5.67	2.211	422	28.	Normal	Slight	+0.0	Pure vinegar.
15335	W. R. Ehot	Plainfield	4.08	1.368	384	30.	Colored	Medium	+—0.0	Mixed vinegar
15549	Wm. Robinson	Robinson	5.49	314	048	40.	Colored	None	+1.2	Colored, distilled.
15152	Moore Grocery Co.	Indianapolis	4.64	2.490	424	34.	Normal	Medium	+—0.0	Pure cider.
15153	Kothe, Wells & Bauer	Indianapolis	4.02	2.108	448	37.	Normal	Medium	—1.0	Pure cider.
15191	C. H. Rinne	Indianapolis	10.88	2.87	371	18.	Normal	Heavy	+2.4	Artificial
15171	Leiter & Shriner	Indianapolis	4.24	2.196	336	26.	Normal	Medium	—8	Pure cider.
15154	Rumsey Bros.	Tipton	3.94	3.400	277	24	Normal	Heavy	—3	Low in acidity.
15331	Prosser & Co.	Burder	4.30	2.84	468	34.4	Normal	Heavy	+—0.0	Pure cider.
15315	Coot Bros.	Wabash	4.05	2.659	306	30.	Normal	Heavy	—8	Pure cider.
15349	Thompson & Wright	Wabash	4.14	217	34	30.	C. W. C.	None	+1.6	Colored, distilled.
15311	Geo. Lammert	Wabash	3.28	340	49	20	Normal	None	+1.	Colored, distilled.
15332	Bettman Wolf	Wabash	4.34	3.055	519	50	Normal	Heavy	—5	Pure cider.
16145	M. F. Davis	Medora	5.00	4.41	337	42	Normal	Slight	—2.6	Mixed vinegar
16178	C. W. Huston	Terre Haute	4.30	339	662	20	Normal	None	+1.4	Distilled.

## VINEGAR—ILLEGAL.

Lab. No.	Manufacturer or Retailer	Where Collected	Acidity.	Solids.	Ash.	Alkalinity of Ash.	Color.	Lead Acetate Precipitate.	Polarization.	Remarks.
13751	J. Ross Robertson	Brownstown	3.57	5.985	490	35.0	Normal	Heavy	—4	Immature, low in acidity.
13887	Berkley Bros.	Salem	3.08	1.0229	318	35.	Normal	Medium	+—0.0	Adulterated.
13888	Berkley Bros.	Salem	4.04	6.920	411	48.	Partly removed	Very slight	+—0.0	Citric acid present
13913	Wm. Ruffery	Princeton	4.66	0.206	028		Removed	None	+—0.0	Adulterated.
14350	D. A. Stockman	Lawrenceburg	3.74	1.644	252	12.	Normal	Medium	+—0.0	Low in acidity.
14622	H. H. Keller Co.	Corydon	3.70	3.271	538	44.	Normal	Heavy	+—0.0	Low in acidity.
14329	C. M. Miller	Corydon	2.92	342	037	6.00	C. W. C.	None	+—0.0	Low in acidity.
14643	Alvord Harlan	Huntingburg	3.25	277	031	2.00	Normal	None	+1.4	Low in acidity; pure
14546	E. W. Blunker	Huntingburg	3.75	2.194	200	11.00	Normal	Medium	—1.6	Low in acidity.
14746	Edging Bros.	Mitchell	2.74	407	082	2.40	C. W. C.	None	+1.6	
14747	J. F. Mathews	Mitchell	3.35	3.26	546	31	Normal	Heavy	—6	
14749	Harry Choppie	Mitchell	3.83	813	073	2.0	Normal	None	+1.0	Low in acidity.
14752	F. R. Brannan	Mitchell	2.38	939	038	4.0	Normal	None	+4.4	Low in acidity.
14903	Dr. Dilley	Brazil	2.85	1.630	441	38.	Normal	Heavy	+0.	Low in acidity.
14953	Johnson & Co.	Freedom	3.73	569	033	2.00	Normal	None	+6.	Low in acidity.
15211	E. A. Palmer	West Baden	2.83	1.076	219	24	Colored	None	+—0.	Low in acidity.
15295	Reber & Wilson	French Lick	6.03	3.152	229	12	Normal	None	+4.4	Artificial; adulterated
15394	C. W. Jackson & Sons	Indianapolis	3.76	2.289	316	24.	Normal	Medium	—2.2	Low in acidity.
15393	Wm. Driver	Lagerange	2.15	1.43	413	30.	Normal	Medium	+—0.	Low in acidity and solids.
15843	Peter Hirskind	Wabash	3.45	274	051	5.0	Normal	None	+1.2	Below standard.
15848	Clark Bros.	Wabash	3.23	1.965	420	36.	Colored	Heavy		Below standard.
15850	L. D. Landenberg	Wabash	3.77	2.787	249	22.0	Normal	Heavy		Below standard.
16079	M. L. Davis	Medora	2.54	2.178	0.379	38.	Normal	Slight	1.8	

## BEVERAGES.

Of the 327 samples of such summer drinks as pops, ginger ale, sodas, fruit ciders, root beers and such proprietary articles as iron brew, orangeade, orcherade, etc., 169 were legal and 158, or 48.2 per cent., were illegal. Those classed as adulterated usually contained an artificial sweetener in the form of saccharin. The use of saccharin is in direct violation of the law in that it is contrary to that section which prohibits the mixing of a substance in food so as to reduce its quality or strength, and also of that section which prohibits the substitution of any substance wholly or in part for the article. Many other samples contained benzoate of soda, added as a preservative. Others were colored in imitation of the genuine article.

## BEVERAGES—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Name of Beverage.	Preservatives or Artificial Sweetener.
13374	Fred Witehens	Knox	Orange Soda	None.
13375	Fred Witehens	Knox	Chocolate Cream	None.
13376	Fred Witehens	Knox	Chocolate Cream	None.
15031	A. Shorter	Winamac	Cider	None.
15112	Crown Cordial Co.	New York City	Syrup with Wine	None.
15230	Soda Pop	Jarret & Galen-shue	Sandborn	None.
15231	Soda Pop	Jarret & Galen-shue	Sandborn	None.
15372	Jna. Dickerson	Richmond	Berry Bonicee	None.
15405	Geo. B. Lee	French Lick	Hop Cream	None.
15408	Walter Smith	Mitchell	Root Beer	None.
15439	Walter Smith	Mitchell	Cream Soda	None.
15414	F. A. Thuis	Vincennes	Pepsi Cola	None.
15416	F. A. Thuis	Vincennes	Blood Orange Pop.	None.
15420	Becker Bottling Works	Vincennes	Lemon Soda	None.
15421	Becker Bottling Works	Vincennes	Strawberry Pop.	None.
15423	Becker Bottling Works	Vincennes	Chocolate Pop.	None.
15469	E. B. Phillips	Spencer	Bottled Soda	None.
15470	E. B. Phillips	Spencer	Bottled Soda	None.
15474	E. B. Phillips	Spencer	Bottled Soda	None.
15475-81	E. B. Phillips	Spencer	Bottled Soda	None.
15481-89	E. B. Phillips	Spencer	Bottled Soda	None.
15593	Ellis G. Hooper	Bicknell	Pop.	None.
15597	Ellis G. Hooper	Bicknell	Pop.	None.
15519	Ellis G. Hooper	Bicknell	Pop.	None.
15521	Ellis G. Hooper	Bicknell	Pop.	None.
15557	Chas. Mayer & Co.	Hammond	Soda	None.
15572	Daniel Clemons	Ft. Wayne	Iron Brew	None.
15573	Daniel Clemons	Ft. Wayne	Ginger Ale	None.
15574	Daniel Clemons	Ft. Wayne	Pop.	None.
15577	Weigand Bros.	Ft. Wayne	Red Pop.	None.
15579	David Klotz	Ft. Wayne	Juniper Ade	None.
15581	Joe Diehl	Ft. Wayne	Juniper Ade	None.
15582	Joe Attala	Ft. Wayne	Chocolate Soda	None.
15594	C. Smith	Kokomo	Red Soda	None.
15595	C. Smith	Kokomo	Ginger Ale	None.
15617	Alton & Ward	Carlisle	Blood Orange	None.
15591	C. Smith	Kokomo	Iron Brew	None.

## BEVERAGES—LEGAL—Continued.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Name of Beverage.	Preservatives or Artificial Sweetener.
15592	I. P. Draper	Kokomo	Cream Soda	None.
15593	C. Smith	Kokomo	White Soda	None.
15616	O. M. Sebring	Shelburn	Champagne Cider	None.
15669	Adam Fines	Delphi	Pop.	None.
15674	Jos. Stewart	Colburn	Pop.	None.
15675-7	Jos. Stewart	Colburn	Pop.	None.
15683	Howard McKimman	Rockfield	Grape Cider	None.
15686	Wm. C. Smith	Pittsburg	Pop.	None.
15784	Harry L. Sharp	Delphi	Pop.	None.
15757	Ed. Welch	Monticello	Apple Cider	None.
15759	M. Watkins	Monticello	Raspberry Cider	None.
15761	R. W. Swisher	Flora	Blood Orange	None.
15762	R. W. Swisher	Flora	Pop.	None.
15763	Wm. Luterbach	Paoli	Hop Cream	None.
15786	Wm. Richter	Vincennes	Blood Orange	None.
15817	Gust. Hoffner	Butler	Cream Soda	None.
15818	Gust. Hoffner	Butler	Lemon Sour	None.
15819	Gust. Hoffner	Butler	Pop.	None.
15824	George Stout	Butler	Birch Beer	None.
15825	George Stout	Butler	Wild Cherry Phosphate	None.
15829	L. E. Dempsey	Butler	Apple Cider	None.
15830	L. E. Dempsey	Butler	Pop.	None.
15837	J. C. Miller	Columbia City	Apple Cider	None.
15894	Alva L. Porter	Culver	Pop.	None.
15895	Alva L. Porter	Culver	Pop.	None.
15896	Howard	Culver	Pop.	None.
15897	Howard	Culver	Pop.	None.
15898	Howard	Culver	Pop.	None.
15899	Howard	Culver	Pop.	None.
15900-9	Howard	Culver	Pop.	None.
15909	L. C. Rex	Mulberry	Grape Juice	None.
15911-21	Fred Wadron	Mulberry	Pop.	None.
16002	Hiram Brooks	Storkwell	Blood Orange	None.
15924	Ray C. Fickie	Mulberry	Pop.	None.
15925	Ray C. Fickie	Mulberry	Pop.	None.
15929	Clarence Verfus	Williamsport	Pop.	None.
15931	Clarence Verfus	Williamsport	Soda	None.
15932	Clarence Verfus	Williamsport	Soda	None.
15933	Wm. F. Verfus	Williamsport	Soda	None.
15934-5	Wm. F. Verfus	Williamsport	Soda	None.
15936-41	Pitcher Bros	Williamsport	Pop.	None.
15943	Wm. Collins	Williamsport	Pop.	None.
15944-6	Wm. Collins	Williamsport	Pop.	None.
15951	C. B. Burlington	Attica	Bottled Pop.	None.
15952	Geo. A. Wheelock	Attica	Pop.	None.
15953	Geo. A. Wheelock	Attica	Pop.	None.
15954	Geo. Feinstein	Attica	Pop.	None.
15956	P. J. O'Donnell	Attica	Pop.	None.
15957-66	P. J. O'Donnell	Attica	Pop.	None.
15975-83	Jas. Sullivan	Veederburg	Pop.	None.
15984	M. L. Watson	Covington	Pop.	None.
15986-94	J. W. Miller	Covington	Bottled Pop.	None.
16004-11	R. F. Conrad	Darlington	Pop.	None.
16012	Ben Honecker	Darlington	Blood Orange	None.
16048	H. C. Hummel	Arcadia	Orange Pop	None.
16049	H. C. Hummel	Arcadia	Iron Brew	None.
16357	H. C. Hummel	Arcadia	Red Pop	None.

## BEVERAGES—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Kind of Sample.	Remarks.
14134	W. H. Richey	Shoals	Jersey Cream Soda	Contains saccharin.
13725	W. J. Hognachi	Hammond	Phospho Brew	Saccharin present.
13726	W. J. Hognachi	Hammond	Soda	Saccharin present.
14870	English Hotel Bar	Indianapolis	White Soda	Contains saccharin.
14871	Herman Goldfman	Indianapolis	White Soda	Contains saccharin.
14872	Herman Goldfman	Indianapolis	White Soda	Contains saccharin.
14873	Louis Sattinger	Indianapolis	White Soda	Contains saccharin.
14874	Louis Sattinger	Indianapolis	White Soda	Contains saccharin.
14875	Carl Carpenter	Indianapolis	White Soda	Contains saccharin.
14876	Carl Carpenter	Indianapolis	White Soda	Contains saccharin.
15922	G. Goehner	South Bend	Orcherade	Saccharin present.
15910	A. Shorter	Winamac	Pop.	Benzoate.
15161	Cave & Martin	Sullivan	Orcherade	Saccharin.
15167	Dick Dattley	Sullivan	Orcherade	Saccharin.
15188	W. M. Draper	Sullivan	Orcherade	Saccharin.
15224-34	Jarret & Galen-shue	Sandborn	Soda Pop.	Saccharin: (10 cases).
15744	T. J. Witham	Monteruma	Art. Cider	Saccharin and coal tar color.
15245	T. J. Witham	Monteruma	Art. Cider	Saccharin, benzoic acid, salt and coal tar color.
15246	Jesse G. Howell	Monteruma	Sweet Cider	Saccharin and benzoate.
15225	Jarret & Galen-shue	Sandborn	Soda Pop.	Saccharin present.
15289	J. M. Sweeney	Dugzar	Bottled Soda	Saccharin present.
15289	J. M. Sweeney	Dugzar	Bottled Soda	Saccharin present.
15355	C. D. Storms	Richmond	Iron Brew	Salicylic acid.
15356	C. D. Storms	Richmond	Red Pop.	Salicylic acid.
15370	J. Foster	Richmond	Red Pop.	Salicylic acid.
15373	Jna. Dickerson	Richmond	Pop.	Salicylic acid.
15375	Clem Heck	Richmond	Pop.	Salicylic acid.
15377	J. T. Foster	Richmond	Pop.	Salicylic acid.
15380	J. F. Bergman	Kokomo	Cream Soda	Saccharin.
15390	J. F. Bergman	Kokomo	Orange Cider	Saccharin.
15371	J. F. Foster	Richmond	Pop.	Salicylic acid present.
15374	J. F. Foster	Richmond	Pop.	Salicylic acid present.
15376	J. F. Foster	Richmond	Pop.	Salicylic acid present.
15394	J. F. Bergman	Kokomo	Pop.	Saccharin present.
15406	Walter Smith	Mitchell	Merry Widow High Ball	Saccharin present.
15407	Walter Smith	Mitchell	Merry Widow High Ball	Saccharin present.
15410	F. A. Thuis	Vincennes	Lemon Soda	Saccharin present.
15411-17	F. A. Thuis	Vincennes	Pop.	Saccharin present.

## BEVERAGES—ILLEGAL—Continued.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Kind of Sample.	Remarks.
15417	F. A. Thuis.	Vincennes.	Lemon Sour.	Saccharin present.
15419	Recker Bottling Works.	Vincennes.	Orchade.	Saccharin present.
15422	Recker Bottling Works.	Vincennes.	Pop.	Benzoate of soda.
15471	E. B. Phillips.	Spencer.	Soda.	Benzoate of soda.
15473	E. B. Phillips.	Spencer.	Soda.	Benzoate of soda.
15480	E. B. Phillips.	Spencer.	Soda.	Benzoate of soda.
15484	E. B. Phillips.	Spencer.	Soda.	Benzoate of soda.
15488	E. B. Phillips.	Spencer.	Soda.	Benzoate of soda.
15490	E. B. Phillips.	Spencer.	Soda.	Benzoate of soda.
15491	E. B. Phillips.	Spencer.	Soda.	Benzoate of soda.
15499	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin and benzoate of soda.
15500	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin.
15502	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin.
15504	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin.
15535-18	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin.
15521-2	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin.
15523	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin.
15527	Ellis G. Hooper.	Bicknell.	Pop.	Saccharin.
15575	F. D. Evans.	Ft. Wayne.	Egyptian Malt.	Benzoate of soda.
15576	F. D. Evans.	Ft. Wayne.	Pop.	Saccharin and benzoate.
15581	Joe Attalla.	Ft. Wayne.	Pop.	Saccharin.
15586	M. F. Mauer.	Muncie.	Iron Brew.	Saccharin and benzoate.
15587	Silas Hale.	Muncie.	Rombre.	Benzoate.
15589-51	Silas Hale.	Muncie.	Cream.	Saccharin and benzoate of soda.
15588	Silas Hale.	Muncie.	Pop.	Saccharin.
15591	Tarnogradski Bros.	Hammond.	Birch Beer.	Saccharin and benzoate of soda.
15593	Tarnogradski Bros.	Hammond.	Soda.	Saccharin.
15596	Mrs. Gindie & Sons.	Hammond.	Soda.	Saccharin.
15578	Wiegand Bros.	Ft. Wayne.	Soda.	Saccharin.
15618	Alsop & Ward.	Carlisle.	Black Pop.	Salicylic acid.
15619-20	J. A. Rooksberry.	Carlisle.	Iron Brew.	Saccharin.
15621	J. A. Rooksberry.	Carlisle.	Blood Orange.	Benzoate of soda.
15623	Ed. McCann.	Carlisle.	Lemon Soda.	Saccharin.
15670-2	Joseph Stewart.	Colburn.	Merry Widow Pop.	Saccharin.
15678-9	Joseph Stewart.	Colburn.	Pop.	Saccharin.
15622	Hicks & Brown.	Carlisle.	Pop.	Saccharin.
15753	Harry L. Sharp.	Delphi.	Blood Orange.	Benzoate of soda.
15756	Henry Grote.	Delphi.	Cherry Cider.	Cold tar present.
15784	Wm. Richter.	Vincennes.	Kelly's Smile.	Benzoate of soda.
15785-8	Wm. Richter.	Vincennes.	Soda and Rye Old.	Saccharin.
15814	Gust. Hoffner.	Butler.	Hop Ale.	Saccharin.
15815	Gust. Hoffner.	Butler.	Axo.	Benzoate of soda.
15816	Gust. Hoffner.	Butler.	Ginger Ale.	Saccharin and salicylic acid.
15820	Gust. Hoffner.	Butler.	Phosphate.	Saccharin.
15821	Gust. Hoffner.	Butler.	Orangeade.	Saccharin and benzoate. Colored.
15822	Gust. Hoffner.	Butler.	Liquid Force.	Benzoate of soda.
15826	Geo. Stout.	Butler.	Pop.	Benzoate of soda and saccharin.
15827	Geo. Stout.	Butler.	Ginger Ale.	Benzoate of soda and saccharin.
15832	Stahl & Strauss.	Columbia City.	Cherrysip.	Benzoate of soda and saccharin.
15837	Stahl & Strauss.	Columbia City.	High Ball.	Benzoate of soda and saccharin.
15834	Stahl & Strauss.	Columbia City.	Iron Brew.	Benzoate of soda and saccharin.
15835	Stahl & Strauss.	Columbia City.	Soda.	Benzoate of soda and saccharin.
15836	Stahl & Strauss.	Columbia City.	Orange Cider.	Benzoate of soda and saccharin.
15838	J. C. Miller.	Columbia City.	Hop Ale.	Benzoate of soda.
15910	Fred Waldron.	Mulberry.	Pop.	Saccharin and benzoate of soda.
15916	Fred Waldron.	Mulberry.	Pop.	Saccharin and benzoate of soda.
15925	Wm. F. Verfus.	Williamsport.	Pop.	Benzoate of soda and saccharin.
15930	Wm. F. Verfus.	Williamsport.	Pop.	Benzoate of soda and saccharin.
15942	Noll & Schneider.	Williamsport.	Ginger Ale.	Benzoate of soda and saccharin.
15953	Pitche Bros.	Williamsport.	Orchade.	Benzoate of soda and saccharin.
15982	Jas. Sullivan.	Veederburg.	Pop.	Benzoate of soda.
16033	B. F. Conrad.	Darlington.	Orchade.	Colored and not labeled.
16015	Walter Chesterson.	Darlington.	Pop.	Colored and not labeled.
16031	Walter Chesterson.	Darlington.	Pop.	Saccharin and benzoate.
16032	Walter Chesterson.	Darlington.	Pop.	Saccharin.
16034	Walter Chesterson.	Darlington.	Pop.	Saccharin.
16034	Walter Chesterson.	Darlington.	Pop.	Saccharin and benzoate.
16067	Dr. J. Coopersier.	Madison.	Soda.	Benzoate of soda.
16061	Dr. J. Coopersier.	Madison.	Soda.	Benzoate of soda.
16062	Dr. J. Coopersier.	Madison.	Soda.	Benzoate of soda.
16093-9	Dr. J. Coopersier.	Madison.	Soda.	Benzoate of soda.
16095	J. C. Miller.	Columbia City.	Apple Cider.	Benzoate of soda.
16096	John Rhoads.	Columbia City.	Apple Cider.	Benzoate of soda.
16098	John Rhoads.	Columbia City.	Cherrysip.	Benzoate of soda and saccharin.
16099	Stahl & Strauss.	Columbia City.	Soda.	Saccharin and colored.

## MISCELLANEOUS FOOD PRODUCTS.

## JELLY—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Article.	Polarization.		Glucose.	Sucrose.	Invert Sugar.	Preservatives.		
				Direct.	Invert.				Saccharin.	Benzoate.	Salicylic Acid.
13242	O. W. Pierce.	LaFayette.	Fruit jelly.	+116.0	+106.4	62.12	7.21	Trace.	0	0.	0
13572	G. O. Warner.	N. Manchester.	Apple.	—13.0	—9.6		4.86	55.0	0	+	0
13553	G. O. Warner.	N. Manchester.	Currant.	+100.4	—91.0	53.34	7.06	Trace.	0	.038	0

## JAM—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Article.	Benzoate of Soda.	Remarks.
14877	Wm. A. Mueller.	South Bend.	Strawberry.	0.18446%	Labeled 1-10 of 1% benzoate of soda.
14878	Wm. A. Mueller.	South Bend.	Raspberry.	0.18446%	Labeled 1-10 of 1% benzoate of soda.
14879	Wm. A. Mueller.	South Bend.	Red Currant.	0.18032%	Labeled 1-10 of 1% benzoate of soda.
14880	Wm. A. Mueller.	South Bend.	Red Cherry.	0.20488%	Labeled 1-10 of 1% benzoate of soda.
14881	Wm. A. Mueller.	South Bend.	Blackberry.	0.18446%	Labeled 1-10 of 1% benzoate of soda.

## OLIVE OIL AND SALAD DRESSING.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Butyro @20°C.	Specific Oil.	Cotton-seed Oil.	Remarks.
13542	Brookmeyer & Son.	Goshen.	64.2	.9125	None.	Pure.
13929	Montani & Co.	Indianapolis.	70.2	.9137	None.	Pure.
14054	G. A. Austgen.	Hammond.	70.2	.9125	Present.	Sold as Salad Oil but not so labeled.

## FLOUR—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Nitrites.	Remarks.
15114	Anna Wickersham	Monticello	Present	Bleached.
15444	C. G. Carpenter	Richmond	Present	Bleached.
15445	C. G. Carpenter	Richmond	Trace	Bleached.
15446	Wm. Elwamer	Indianapolis	Trace	Bleached.
15462	N. G. Dixon	Hinton		Bleached.
16052	Jesse Copper	Waymansville	Meal	Worms present.

## MISCELLANEOUS FOOD PRODUCTS.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Name of Article.	Remarks.
14544	Mooney	Terre Haute.	Peanut Butter	Butyro = 65.2%.
14813	J. E. Gloucekenous.		Ice Cream Fluff	Starch present.
14859	C. G. Stumpp.	Washington.	Freezon Pickle	No Sulphites.
15388	J. T. Thomas.	La Grange.	Canning Compound	Boric Acid 97.2%.
15751	E. H. Done	Delphi	Creamthick	Gum Arabic.
15755	H. L. Sharp	Delphi	Parfait Powder	Starch.
14699	W. B. Morris	Terre Haute	Pium Pudding	
15763	Delaney	Delphi	Preservatory	Powder Borax.
15903	Crothersville Canning Co.	Crothersville.	Hominy	

## BAKING POWDER.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Available Carbon Dioxide.	Remarks.
13099	T. H. Bryant	Rockville	8.42%	Below standard.
13569	P. Van Derweel	Knox	5.77%	Below standard.
13570	Grosham & Son	Knox	12.31%	Pure.
13965	Dr. Peyton	Jeffersonville	9.81%	Below standard.
15533	Wm. Warner	Summitville	14.14%	Pure.
15692	Wm. Warner	Summitville	12.87%	Pure.

## CANDY.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Name of Article.
14058	W. E. Musser	Freedom	Chocolate, Coated.
14938	J. N. Luens	Freedom	Chocolate.
14960	J. N. Luens	Freedom	Chocolate.
15110	A. B. Newhunnery	Terre Haute	Chocolate Drops.
15111	A. B. Newhunnery	Terre Haute	Cocoanut Bonbons.

## EXTRACTS—VANILLA—LEGAL.

No.	Manufacturer or Retailer.	Where Collected.	Vanillin.	Total Extract.	Sucrose.	Extract Not Sucrose.	Lead Acetate Precipitate	Remarks.
13541	Brookmeyer & Son.	Goshen	0.2232	9.69	4.88	3.71	Heavy	Pure.
13558	Schaull & Co.	Indianapolis	0.2892	17.52	8.06	9.46	Heavy	Pure.
13564	S. Weeners	So. Whitley	0.3232	7.78	0.44	7.34	Heavy	Pure.
13745	H. Glasley	So. Whitley	0.1252	10.16	4.98	5.18	Heavy	Pure.
13721	Amos Gipe	Wabash	0.1768	9.39	6.47	2.98	Heavy	Pure.
13773	L. A. Jackson	Indianapolis	0.3636	14.96	8.53	6.43	Heavy	Pure.

## LEMON—LEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Specific Gravity 20°C.	Alcoholic Volume	Color.	Per Cent. Oil.	Polarization Reading.	Remarks.
13614	J. W. Danhour	Clay City	.8275	90.0	Natural	4.87	15.6	Labeled "Tr. Lemon Peel."
13616	W. C. Duncan	Clay City	.9395	48.1	Natural		28.8	Colored but labeled properly.
13774	H. A. Jackson	Indianapolis	.8532	65.0	Natural	6.02	21.2	Pure.
13959	Bement Ren	Terre Haute	.8480	83.0	Natural	5.06	16.2	Labeled "Alcohol 85%."
14618	Geo. E. Green	Aurora	.9327	48.5	Natural	0.18	0.6	"Lemon Flavor Compound."
14636	M. E. Robbins	Mishawaka	.8475	83.7	No.	5.93	19.0	Pure.
14837	M. E. Robbins	Mishawaka	.9510	37.9	Artificial		10.4	"Turpentine Lemon."
14905	H. Homan	Switz City	.8437	84.9	No.	5.87	18.8	Pure.
14961	W. R. Anderson	Lyons	.9303	45.0	No.	0.00	00.0	Labeled properly.
15038	Big Four Pharmacy	Terre Haute	.9313	37.7	Artificial	00	0.1	Labeled correctly.
15791	Heitman Bros	Holland	.9412	43.9	No.	18	0.6	Pure.
15792	Heitman Bros	Holland	.8447	55.1	No.	5.62	18.	Pure.

## EXTRACTS—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Where Collected.	Article.	Specific Gravity 20°C.	Alcoholic Volume.	Per Cent. Oil.	Polarization Reading.	Remarks.
14893	Jerome Boele	Brazil	Banana					Not labeled correctly.
14894	Jerome Boele	Brazil	Strawberry					Not labeled correctly.
15240	E. E. Douglas	Hillsdale	Lemon	.9623	37.1		0.2	Artificially colored.
15275	James H. Eaben	Ft. Wayne	Lemon	.9192	45.1	0.59	1.9	Misbranded and below standard.

## RESULTS OF FOOD ANALYSES.

Article Examined	Legal.	Illegal.	Total.	Per Cent. Adulteration.
Temperance beer.....	22	0	22	0.0
Beverages.....	169	158	327	48.2
Vinegar.....	58	27	85	31.7
Candy.....	5	0	5	0.0
Olive oil.....	3	0	3	0.0
Extracts—Lemon.....	12	0	12	0.0
Vanilla.....	6	0	6	0.0
Extracts—Miscellaneous.....	0	4	4	10.0
Vegetables.....	13	0	13	0.0
Canned fruit.....	4	1	5	20.0
Baking powder.....	7	0	7	0.0
Flour.....	0	5	5	100.0
Meal.....	0	1	1	100.0
Jam.....	4	1	5	20.0
Jelly.....	4	0	4	0.0
Maple Sugar.....	7	3	10	33.3
Maple syrup.....	38	8	47	17.0
Oysters.....	0	4	4	100.0
Lard.....	22	4	26	15.4
Weinerwurst.....	6	13	19	68.9
Liverwurst.....	3	2	5	40.0
Sausage.....	28	30	58	51.7
Hamburger.....	26	9	35	25.7
Bologna.....	0	5	5	100.0
Ice cream.....	111	70	181	38.6
Buttermilk.....	2	0	2	0.0
Butter.....	59	15	74	20.2
Condensed milk.....	8	7	15	53.8
Cream.....	26	12	38	31.5
Milk.....	328	65	393	16.5
Miscellaneous.....	9	0	9	0.0
Total.....	979	444	1,423	30.5

## DRUGS.

But few samples of drugs have been analyzed during the last six months because it is apparent that the adulteration of these products is decidedly less than heretofore, and is confined chiefly to goods which deteriorate on standing. In some instances, as in the case of spirits of camphor, where a high per cent. of adulteration is still noted, it is apparent that the druggist continues to misinterpret the instructions given in the pharmacopoeia, and instead of making up his spirits by dissolving 100 grams of camphor gum in alcohol and making up to a litre, dissolves the proper amount of camphor gum in a litre of alcohol, thus producing a spirits which runs about 10 per cent. low in gum content. There can be no excuse for continuing the adulteration of tincture of iodine and tincture of iron. Of the 150 samples analyzed, 100 are pure and 50 adulterated, thus showing an adulteration of 33.33 per cent.

Little or no violation of that section of the law which regulates the amount of alcohol or inhibited drug content to be stated on the label has been noted. While the drug trade feared that this section would work a hardship upon it, yet the employment of corrected labels has apparently made it possible for the druggist to label his goods properly with no greater trouble than before the law became effective.

## LIME WATER—LEGAL

Lab. No.	Manufacturer or Retailer	Place of Collection	Per Cent. U. S. P.
13918	Henry Tepe	Evansville.....	109.4
14017	Gibson & Reidel	Madison.....	120.0
14021	Harper & Co.	Madison.....	116.8
14973	Cooney & Co.	South Bend.....	120.0
14977	Wood & Striebler	South Bend.....	115.7
14982	O. C. Bastion	South Bend.....	122.1
14988	N. Schilling	South Bend.....	117.8
14993	Wm. Patterson	South Bend.....	117.8
14998	Central Pharmacy	South Bend.....	117.8
15008	H. E. Freehafer	South Bend.....	123.1
15013	White's Pharmacy	South Bend.....	103.1
15017	M. M. Meyer	South Bend.....	115.2

## LIME WATER—ILLEGAL

Lab. No.	Manufacturer or Retailer	Place of Collection	Per Cent. U. S. P.
14025	W. H. Roelke	Madison.....	9.4
15003	V. Niedbalski	South Bend.....	68.4

## TINCTURE OPIUM—CAMPHORATED.

Lab. No.	Manufacturer or Retailer	Place of Collection	Specific Gravity	Alcohol Volume	Alcohol on Label	Opium Per Fl. Oz.
13627	F. W. Thomas	Winamac.....	.9495	43.3	49.0	1.6
13630	Marshall Casper	Winamac.....	.9620	45.9	46.5	1.9

## TINCTURE FERRIC CHLORIDE.

Lab. No.	Manufacturer or Retailer	Place of Collection	Specific Gravity	Alcohol Volume	Alcohol on Label	Per Cent. U. S. P.
13157	J. P. Riley	Paoli.....	.9767	65.1	62.0	100

## TINCTURE OF IRON—LEGAL.

Lab. No.	Manufacturer or Retailer	Place of Collection	Specific Gravity, 20°C.	Alcohol Volume	Alcohol on Label	Sodium Sulphate	Per Cent. Fe.	Per Cent. U. S. P.
13463	T. W. Hollenbeck	Indianapolis.....	.9940	60.7	62.0	18.0	4.55	100
13468	Milikan Pharmacy	Indianapolis.....	1.0075	54.4	62.0	18.2	4.55	100
13472	T. H. Carter	Indianapolis.....	1.0130	57.3	62.0	19.9	4.97	108.6
13476	Waddell & Walterhouse	Indianapolis.....	1.0097	58.1	62.0	18.6	4.65	101.5
13479	W. H. Burget	Indianapolis.....	1.0075	55.2	70.0	19.1	4.77	104.3
13485	Schwankhous	Indianapolis.....	1.0366	49.5	62.0	19.8	4.85	108.1
13488	J. M. Scott	Indianapolis.....	1.0101	55.1	62.0	19.6	4.90	107.0
13490	L. A. Gable	Indianapolis.....	.992	58.4	62.0	18.0	4.579	100
13492	F. Erdelmeier	Indianapolis.....	1.0154	55.8	62.0	19.4	4.85	105.9
13494	S. Muhl	Indianapolis.....	1.0062	56.6	62.0	18.3	4.575	102.0
13497	Prattins	Indianapolis.....	1.0186	54.7	62.0	19.9	4.975	108.6

## TINCTURE OF IRON—ILLEGAL.

Lab. No.	Manufacturer or Retailer	Place of Collection	Specific Gravity	Alcohol Volume	Alcohol on Label	Sodium Sulphate	Per Cent. Fe.	Per Cent. U. S. P.
13089	G. G. Graham	Veedsburg.....	1.0211	46.6	62.0	15.9	4.05	88.4
13465	James Mead	Indianapolis.....	.9432	68.2	62.0	12.6	3.20	69.8
13481	H. O. Atchison	Indianapolis.....	.9938	59.6	62.0	17.5	4.40	96.1
13483	L. S. Stockman	Indianapolis.....	.9810	63.3	62.0	16.5	4.15	90.6

## SPIRITS OF CAMPHOR—LEGAL.

Lab. No.	Manufacturer or Retailer	Place of Collection	Specific Gravity @20°C.	Alcohol Volume	Alcohol on Label	Polarization Reading	Per Cent. U. S. P.
13581	H. R. Koffel	Knox.....	.8210	81.4	86.0	12.1	100.8
13682	Bowman & Watson	Gary.....	.8410	79.2	86.0	14.1	116.6
13808	Geddes & Harding	Butler.....	.8347	81.4	86.0	14.9	124.1
14078	B. F. Pendig	Rensselaer.....	.8362	81.8	86.0	15.3	126.6
14079	A. F. Long	Rensselaer.....	.8317	82.9	86.0	13.3	110.8
14081	J. A. Leach	Rensselaer.....	.8340	81.4	86.0	12.0	100
14506	Taylor & Roth	Edinburgh.....	.8283	84.0	86.0	13.0	108.3
14515	C. H. Drybread	Franklin.....	.8307	83.6	86.0	13.1	109.1
14521	Agnes Drug Co.	Converse.....	.8352	81.1	86.0	15.1	124.8
14523	Leum & Gift	Converse.....	.8283	80.4	86.0	12.8	106.6
14830	Schiff & Gift	Minnowaska.....	.8338	79.6	86.0	13.5	112.5
14931	Wm. H. Reeves	Frederick.....	.8376	91.1	17.5	17.5	145.8
14981	O. C. Bastion	South Bend.....	.8207	79.3	86.0	96	106.6
14985	Nicholas Schilling	South Bend.....	.8433	74.5	86.0	86	180.0
15001	V. Niedbalski	South Bend.....	.8722	65.4	86	13.3	110
15016	Meyer Drug Store	South Bend.....	.8325	78.9	90	12.0	106
16090	Chas. Cooney & Co.	South Bend.....				12.0	100

## SPIRITS OF CAMPHOR—ILLEGAL.

Lab. No.	Manufacturer or Retailer	Place of Collection	Specific Gravity	Alcohol Volume	Alcohol on Label	Polarization Reading	Per Cent. U. S. P.
13592	F. A. Green	Knox.....	.8305	81.9	86	10.5	97.5
13629	Marshall Casper	Winamac.....	.8283	85.5	86	10.0	93.3
13634	Smith's Drug Store	Winamac.....	.8448	77.3	86	8.6	71.6
13669	M. O. Beck	Albion.....	.8312	83.6	86	10.9	90.8
13677	Hall's Pharmacy	Gary.....	.8340	80.8	86	11.7	97.5
13678	Brennan	Gary.....	.8270	83.6	86	9.3	77.5
13681	Gary Pharmacy	Gary.....	.8415	79.1	86	8.8	73.3
13805	Stone's Drug Store	Butler.....	.8307	84.0	86	11.4	95.0
13998	W. F. Peters	Madison.....	.8270	85.1	86	8.4	70.0
14018	Gibson & Reidel	Madison.....	.8297	84.7	86	11.7	97.5
14020	J. E. Harper Co.	Madison.....	.8310	84.4	86	11.7	97.5
14024	H. Rogers	Madison.....	.8323	83.6	86	11.5	95.8
14500	C. E. Croelius	New Albany.....	.8225	86.6	86	4.5	37.5
14537	Dr. Rush	Owensburg.....	.9260	43.5	86	4.1	34.1
14969	Chas. Cooney	South Bend.....	.8300	81.1	85.0	11.3	94.1
14978	Wood & Striebler	South Bend.....	.8280	79.3	92.0	9.4	78.3
14990	W. M. Patterson	South Bend.....	.8265	80	86	11.0	91.8
14997	Central Pharmacy	South Bend.....	.8302	80.4	86.0	11.1	92.5
15007	H. E. Freehafer	South Bend.....	.8682	67.5	86	10.8	90.0
15012	White's Pharmacy	South Bend.....	.8350	78.9	86	10.9	90.8
15054	White's Pharmacy	South Bend.....	.8357			10.6	88.3

## TINCTURE OF IODINE—LEGAL.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Grams Iodine Per 100 c.c.	Per Cent. U. S. P.
13674	H. D. Stone.	Albion	7.15	104.3
13604	Stone's Drug Store.	Butler	7.20	105.0
14019	G. Mason & Reidel.	Madison.		100.5
14022	J. E. Harper Co.	Madison.		153.7
14023	W. H. Rogers.	Madison.		101.6
14028	Shore & Wilson.	Rochester.	7.15	104.3
14080	J. A. Larsh.	Rensselaer.		101.6
14725	Owl Drug Store.	Bedford.	6.82	99.41
14736	Dodd & Douthitt.	Bedford.	7.14	104.07
14781	A. F. Long.	Rensselaer.	7.59	110.64
14890	Simon Herr.	Brazil.	7.44	109.17
14870	Chas. C. Conley & Co.	South Bend	7.31	106.57
14974	Wood & Strieble.	South Bend.	7.11	103.70
14979	Otto C. Bastion.	South Bend	7.05	102.82
14934	Central Pharmacy.	South Bend.	7.17	104.59
14999	V. Nirdhalski.	South Bend.	8.17	119.09
15004	H. E. Freehoffer.	South Bend.	6.98	101.83
15009	White's Pharmacy.	South Bend.	8.83	99.63
15014	Meyer Drug Store.	South Bend.	7.15	104.22

## TINCTURE OF IODINE—ILLEGAL.

13664	B. E. Miller.	Albion	6.4	92.5
3668	M. C. Beck.	Albion	6.85	92.5
13-09	C. E. Miller.	Butler	5.64	82.0
14040	S. M. Newby.	Rochester.	5.86	85.6
14077	B. F. Fendig.	Rensselaer.	1.81	26.4
14078	A. F. Long.	Rensselaer.	4.70	68.8
14514	Mutz & Lynch.	Edinburg.	6.70	97.6
14522	Agass Drug Co.	Converse.	6.63	98.5
14524	Lau & Gift.	Converse.	6.01	77.7
14732	Dodd & Douthitt.	Bedford.	3.14	47.19
14800	Lau & Gift.	Converse.	6.72	97.01
14831	Schiffers & Co.	Mishawaka.	6.16	89.87
14984	N. Schilling.	South Bend.	6.05	88.13
14989	W. M. Patterson.	South Bend.	6.65	98.83
15223	H. V. Stark.	Shelburne.	8.13	89.36
15243	Arch Yazel.	Elkhart.	3.57	52.12
15612	Wirt Cummins.	Hymers.	6.7	92.84

## AROMATIC SPIRITS OF AMMONIA—LEGAL.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Specific Gravity 20°C.	Alcohol Volume.	Alcohol on Label.	Polarization 200 m.m. Tube.	Color.
13916	Henry Tepe.	Evansville.	8975	61.1	64.4	+3.2	
14972	C. Conley & Co.	South Bend.	8967	61.1	65.0	+3.1	Colorless.
14975	Wood & Strieble.	South Bend.	9185	52.4	70.0	+2.2	Col. clear.
14987	Nicholas Schilling.	South Bend.	9057	58.3	65.4	+1.3	Sl. Brown.
14992	Wm. M. Patterson.	South Bend.	8970	62.3	64.6	+3.3	Sl. Brown.
14996	Central Pharmacy.	South Bend.	9003	56.2		+2.8	Brown-Yellow.
15002	V. Niedbalski.	South Bend.	8940	62.9		+3.4	Very Yellow
15036	H. E. Freehoffer.	South Bend.	9015	61.1	70.	+3.5	Brownish.
15011	White's Pharmacy.	South Bend.	9070	56.1		+2.0	Very Yellow
15018	M. M. Meyer.	South Bend.	9030	57.7	70.0	3.0	Brown Colorless.

## AQUA AMMONIA.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Per Cent. Ammonia by U. S. P. Method.	Specific Gravity 20°C.	Remarks.
14781	A. F. Long.	Rensselaer.	8.19	9634	Below standard.
15287	Chas. Mason.	Dugger.	8.97	9635	Below standard.
15610	McKissick Drug Co.	Hymers.	6.66	9720	Below standard.

## PAREGORIC.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Specific Gravity 20°C.	Alcohol Volume.	Alcohol on Label.	Grains Opium per fl. oz.
13665	B. E. Miller.	Albion.	9452	40.5	None.	None.
13666	W. C. Beck.	Albion.	9516	40.9	46.5	1.9
13671	H. D. Stone.	Albion.	9434	44.1	46.5	1.9
13676	Hall's Pharmacy.	Gary.	9513	38.3	None.	None.
13679	Brennan & Stringfellow.	C. City.	9450	42.	None.	None.
13680	Gary Pharmacy.	Gary.	9497	40.9	45.5	1.9
13683	Borman & Watson.	Gary.	9513	38.3	46.5	1.9
14029	Shore & Wilson.	Rochester.	9515	38.7	44.0	1.4
14041	S. M. Newby.	Rochester.	9529	39.3	46.5	1.9

## TINCTURE OF MYRRH.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Specific Gravity 20°C.	Alcohol Volume.	Alcohol on Label.	Grams Extract per 100 c.c.	Grams Ash per 100 c.c.
13090	E. M. Henderson.	Brownburg.	8342		None.	5.213	.015
13462	I. W. Hollenbeck.	Indianapolis.	8475	8.9	95.0	6.431	.015
13466	Jas. Mead.	Indianapolis.	8367	83.1	90.0	4.873	.018
13467	Miliken Pharmacy.	Indianapolis.	8425	82.1	None.	5.542	.058
13470	J. C. Clark.	Indianapolis.	8345	85.0	90.0	4.867	.018
13473	T. H. Carter.	Indianapolis.	8282	87.3	90.0	3.050	.013
13475	Waddell & Walterhouse.	Indianapolis.	8287	87.3	90.0	3.556	.008
13478	W. H. Burket.	Indianapolis.	8390	82.2	90.0	3.878	.015
13486	H. Schwankbous.	Indianapolis.	8315	86.6	None.	4.063	.012
13487	J. M. Scott & Son.	Indianapolis.	8374	83.1	95.0	6.059	.016
13489	L. A. Gable.	Indianapolis.	8513	79.0	90.0	6.845	.062
13493	F. Erdelmeyer.	Indianapolis.	8412	83.8	90.0	6.025	.009
13495	S. Muhl.	Indianapolis.	8395	84.5	None.	5.593	.008
13498	Phyllis.	Indianapolis.	8406	83.6	D.O.	6.059	.001

## DRUGS—MISCELLANEOUS.

Lab. No.	Manufacturer or Retailer.	Place of Collection.	Articles Examined.	Remarks.
13782	Jas. M. Dinnen.	Ft. Wayne.	Snuff.	Cocaine 4.93%.
13873	Brought in by Zigerle & Co.	Huntington.	Linseed Oil.	Filtered oil; adulterated.
15029	Dr. W. E. Schweir.	Knox.	Alcohol.	No metallic poison.
15657	Mrs. E. Douglass.	Greensburg.	Opium Salve.	Arsenic detected.

## RESULTS OF DRUG ANALYSIS.

Article Examined.	Legal.	Illegal.	Total.	Per Cent. Illegal.
Lime Water.	12	2	14	14.2
Tincture of Opium, Camphorated.	2	0	2	0.0
Tincture of Ferric Chloride.	1	0	1	0.0
Spirit of Camphor.	17	21	38	55.2
Tincture of Iodine.	19	18	37	48.6
Tincture of Iron.	11	4	15	26.6
Aromatic Spirit of Ammonia.	10	0	10	0.0
Aqua Ammonia.	0	3	3	33.3
Paragoric.	9	0	9	0.0
Tr. Myrrh.	14	0	14	0.0
Drugs, Misc.	5	2	7	28.5
	100	50	150	33.33

## TESTING COWS FOR TUBERCULOSIS.

A. W. BITTING, M. D., STATE VETERINARIAN.

Last year nearly 13,000 cows were tested for tuberculosis in this State. Official tests were made on 8,720 head in Lake, Porter and adjoining counties, Ft. Wayne tested nearly 1,300 head, 1,000 other official tests were made in various places and the remainder were conducted in private practice. The 8,720 cows in the northwest section were divided into 560 herds and 757 reacting animals were found in 268 herds. The percentage of reacting animals was 8.6 or lower than might have been expected, but the percentage of infected herds, 48 per cent., was very high. This condition is to be explained upon the basis that the section is comparatively new as a dairy center, that frequent exchange has been made of the cows and many purchases made from the stockyards. At Fort Wayne only 17 per cent. of the herds were found to be infected, but 10 per cent. reacted. This probably more nearly represents the conditions found throughout the State.

The tests in the northwest section of the State have a special value in that they include nearly the entire bovine population of that section. In 185 herds, or one-third of those tested, there were only one or two

reacting cows, a total of 245 head, or just one-third of the entire number of reactors. These herds could have been freed from disease by sale or slaughter at little sacrifice to the owners, and instead of only 52 per cent. of the herds being free it could be easily increased to 85 per cent. the first year. The 20 herds having the highest number of reactors had 262 diseased cows or more than the 185 herds. These highly infected herds had been kept together for a long time or had been made up to a large extent from purchases at the stockyards. They serve to show what may be expected to occur in the other herds unless some measures are taken to eliminate the infection.

The last locality at which testing was done, out of 490 cows tested, 285 reacted, 111 were slaughtered and 30 condemned as unfit for food. An even more startling record than this was found. A man took 25 hogs to market, and upon slaughter and federal inspection 23 were found to be diseased with incipient tuberculosis, 4 were condemned as unfit for food. An inspection of the premises was made and a suspicious looking steer killed and well developed lesions of tuberculosis were found. Seven head of cattle were tested and 10 hogs, 4 of the cattle and 5 of the hogs reacted. The family cow, two of the hogs and some apparently sick shoats were slaughtered and all had clear cases of the disease. At this time there were 25 head of cattle and 200 hogs on the farm. Later 164 of the hogs were unlawfully sent out of the State, and upon inspection the following record is obtained: One packer bought 132 head and 130 were diseased, 61 being condemned; another packer bought one and it was condemned; 15 head were reshipped to one point and 8 condemned, and 16 became mixed with another lot and the record lost. Later 13 head of cattle were taken to market for slaughter, 3 were killed and found to be diseased and the butcher refused to kill the remainder. The 10 remaining head and one other were then shipped to another point and on post-mortem 6 were found to be diseased. Still later other cattle were shipped, 7 of which were found to be diseased and 4 were condemned. The inspector visiting the premises reported that the chickens were diseased; the owner has died since the trouble began and the statement is given that the cause was "throat trouble." There are still other chapters to be added to this record.

One of the results of the testing during the past year has been to develop a good economical system. The usual method of taking temperatures for a period of forty-eight hours, limited the work to small numbers and made the cost amount to from one to three dollars per head. It was found that the work can be done in one day, and that the cost need not exceed 30 cents per head. Two men can test between 200 and 250 head per week. Upon this basis, a city the size of Lafayette could test all the herds furnishing its milk

supply in a few weeks and at a cost not to exceed \$300.

The law enacted by the last legislature provides that any dairyman may have his herd tested at actual cost. In the event diseased cattle are found he has three options: 1st. To prepare the affected animal or animals for market and to sell subject to post-mortem examination. The federal rules and regulations shall govern the inspection. If the animal passes as fit for food he receives its market value; if it fails to pass, he can recover only the value of the hide, and body as fertilizer. 2d. He can retain his cows for dairy purposes provided the milk be pasteurized in a manner approved by the State Board of Health. No animal showing any physical evidence of disease can be used in such manner. 3d. He may retain valuable breeding stock for breeding purposes under conditions approved by the State Veterinarian. The State makes no compensation for diseased animals except when condemned by the State Veterinarian. In the case of tuberculosis, he must quarantine and give the owner a choice of one of the three options.

Indiana has a good law, much better than most states. By the enactment of local ordinances, most of the cities could have a tested milk supply in a very short time. The season in which to do the work is at hand, and will continue until about April 1.

## PURE FOOD AND HEALTH LAWS.

Not a few of our laws are resultants of our complex civilization, which certainly tends toward higher complexity. Among such laws are those which have for their object the protection of the public health, and the protection of the food supply against adulteration. Within the memory of living men, such a thing as food adulteration was unknown. In pioneer days, feeding was simple and more rational than in these times. Then, families sat down to tables which were supplied with pork and beans of home production, to corn bread, apple sauce, chickens raised naturally in woods and fields, to milk and butter produced from non-tuberculous, non-swill fed cows, which stood almost at the kitchen door; doughnuts, hot from the sizzling lard; pumpkin pies made from pumpkin which had not been cooped for months; hominy made in the very room in which it was eaten, instead of being taken from a can filled in a frame shed somewhere and called a canning factory. And what delicious flavors were attendant upon all of these articles. With what joy did they salute the gustatory nerve, and how gratefully they were received by the stomach.

But these days are not necessarily gone, for even now it is not required to live the canned life. The city cliff dweller finds the canned life handy and con-

venient, and lives it at the cost of the good health and superior enjoyment which attend simple and more natural nutrition. If he would supply himself with a "fireless-cooker," and in the evening before retiring would start his plain breakfast in it, he would in the morning have food which would give him superior gustatory pleasure, a clear head and abundant energy. Instead of a simple rational breakfast, our cliff-dweller has embalmed hog, better known as ham and bacon, or highly spiced sausage, or beefsteak from a tuberculous animal or from an animal slaughtered and its meat kept under the most revolting conditions.

Eggs, most always from cold storage, are added, and all is washed down with black coffee. Such a breakfast is not a balanced ration. It makes too much soot and ash and so clogs the furnace grates and the boiler's flues. Clearness of head does not attend, and kidneys and liver suffer from overwork in clearing away the debris. In time, Bright's disease appears, and the victim wonders where it came from. "Why was I selected to have this malady?" he asks. Eat plain, unembalmed foods, cooking them well. Potatoes, rice, hominy, vegetables, fruit, cornmeal, well baked whole-wheat flour bread, milk from healthy animals and a clean dairy, fresh eggs or none. What more can one want? Darwin, Spencer, Pasteur, lived entirely upon such food, and they did some good work too. A gentleman of my acquaintance was one time a guest of Darwin's on his farm in Kent. For supper, bread and milk was offered; nothing more, and no apology. Darwin's work was certainly worth a million times more to humanity than the work of Harriman. Rich, highly spiced foods, catsup, pickles, fancy cooking, much meat, are all hard on kidneys and livers.

Excessive use of salt is injurious. The blood and the body need only a very little salt. A man weighing 150 pounds contains only a little over one ounce. We all eat a great deal more salt than is for our good. Certain forms of stomach troubles are caused by excessive salt eating. If your stomach hurts, try cutting out salt, salads, pickles, catsups and meats and chew your plain foods extra well. You will find this treatment has the pepsin and drug treatment skinned a mile. Well, the whole lesson is—pure food laws are needed principally because we will not eat rationally. It is the same with health laws. We need health laws because we refuse to live according to the natural laws of our well-being. We have consumption, because we spit, because we just will not thoroughly ventilate our school rooms, our bedrooms, our offices, our churches and our public halls. We ride in closed trolley cars and breathe the fetid air which has already been down into the lungs of others, we heave in alcohol and meats and spices, and fray our nerves with caffeine. Old Solomon said: "Be ye not among wine bibbers, among riotous eaters of flesh."

We have typhoid fever, and spend enough on it annually to present every member of the legislature and each doorkeeper with a red automobile, just because we will not dispose of human and animal manure in a sanitary way. Sir Frederick Treves, King Edward's physician, who has grown rich and great off disease, has said: "When simplicity and frugality of living is achieved, voluntary celibacy will become discreditable, and the premature deaths of the bread-winners will disappear before sanitized cities and vanishing intemperance."

**A MODEL REPORT:** We take great pleasure in publishing the following special report made by Dr. Simon J. Young, County Health Commissioner of Porter County. It is a model, and we commend its form to other County Health Commissioners:

"I herewith submit my special monthly report for September, 1909:

September 7. Met with County Council. Succeeded in getting appropriations for 1910 as follows:

Salary, health commissioner.....	\$300 00
General fund, for health work.....	\$200 00

The following health notice was inserted in the daily and weekly papers:

#### IMPORTANT HEALTH NOTICE.

Scarlet fever and diphtheria are prevalent and increasing. In fact, we are confronted with the conditions for a serious epidemic, so widespread and numerous are the centers of infection. Two things are necessary to stamp out these maladies—strict quarantine for a sufficient length of time, and thorough fumigation following every case.

I am constantly importuned by those under quarantine to be released or to be allowed special privileges.

By those who are not under quarantine, we are sometimes criticised for not drawing the lines tighter.

The purpose of this notice, therefore, is to define my position in the matter; and I, therefore, give notice that quarantine must and shall be enforced in every case alike. No one shall be exempt, and, if necessary, arrests will be made to enforce the law.

Whatever may have been the custom in the past, we are living in an age when it is a public disgrace to have epidemics. The undersigned is the steward of the public health; and the law is designed to afford protection to the general public, and so long as I am entrusted with that stewardship I will make an effort to discharge it faithfully.

To that end I ask the co-operation of every citizen. Every known violation will be reported to the prosecutor, whose duty it is to cause the arrest and punishment of the offenders.

September 24. Attended meeting at Central School building. Law was explained and co-operation urged to enforce quarantine.

September 28. Letters were sent to each physician in the county, asking that they observe reasonable precautions in visiting infectious diseases in conformity with Rule 12 of the State Board.

SIMON J. YOUNG,  
County Health Commissioner."

## THE REASONING OF THE MASSACHUSETTS SUPREME COURT.

A young man chooses medical science as his life work. He prepares himself in the schools. He complies with the requirements of the law governing the entrance to practice. *He now has duties to fulfill—to the state, to his patients and families and to medical science.* His first duty to his state is to completely obey its laws. Disputing their justice and constitutionality if he thinks best, but still obeying them until repealed or nullified by the courts. His duties to his patients and his families *are not fulfilled until he has obeyed fully the laws* upon which he leans for protection. The law commands him to report the deaths, births and infectious diseases which come under his professional supervision. Not to do this, marks him as a violator of law and as not performing all of his duties to his patients.

The argument closes as follows: The decision of the lower court is sustained. The appellant did not completely fulfill his duties to his patient. He is not entitled to a fee.—Exchange.

## MAINTENANCE OF UNFORTUNATES.

Reports show that the people of Indiana spent \$3,341,454 last year to maintain unfortunates. The average annual expenditure for this purpose has been over \$3,500,000. Now the question arises: Is it not possible to prevent having so many unfortunates? It certainly is possible. But how? It is known that sickness causes poverty, chronic invalidism, mental incapacity, and quite all of the qualities which make unfortunates. Of course, other causes also create unfortunates. As for sickness, hygiene stands ready to reduce it materially. This science teaches that fully 30 per cent. of all sickness endured is unnecessary. The people should open their ears and minds to the truths of hygiene, and when these truths are understood then apply them practically to every day life. For instance—30 to 40 per cent. of all orphans (unfortunates) are created by consumption. Consumption is a preventable disease and is curable in its beginnings. Why then not prevent consumption and not permit it to slay mothers and fathers and thus make so many orphans. It is cheaper to prevent than to have or to cure. So money is to be made by practically applying hygiene, besides gaining strength and happiness.

The effort of the State Board of Health to save life, to save money and to promote happiness through practical hygiene, are frequently laughed at, and the board called cranks. If this ignorant attitude were abandoned, and a desire to know, to understand, and to be practical in this matter, were substituted, then incalculable advantages would be gained.

## DRUGS AND HEALTH.

Why do we take drugs? Because we are sick. Yes, but why are we sick? Is sickness due to right living or to wrong living? Are we sick because we obey the laws of health or because we disobeyed them? Paregoric relieves (it doesn't cure) green apple colic in the boy. Is eating green apples a sensible act? Pepsin and bismuth relieve (they don't cure) indigestion. What causes indigestion? Is it the result of eating proper food in proper amount in the proper way? Or, is it the result of eating improper food in improper amount in an improper way? If the latter, why do it? Is it our large amount of common sense which leads us to it? What is good for a cold? Syrup of wild cherry, syrup of squills and paregoric mixed together make a "good cough medicine." Yes, but why overeat and breathe bad air and so make a cold. You don't have to over eat and you don't have to breathe foul air. Just observe closely the next time you have a cold and see if it did not follow a big feed and close confinement in an unventilated room. Live on plain, well-cooked, well-chewed food, breathe pure air, be temperate and you will never have a cold, pneumonia or other diseases of the breathing organs. We don't have to have colds and then take squills, paregoric and wild cherry to cure (?) them. The whole business is simply evidence of our impracticability, of our foolishness. What drugs are good for (relieve) constipation? Salts or cathartic pills, of course. Yes, but why eat spices, why eat ham, bacon, highly spiced sausage or other embalmed flesh and constipating foods in such large quantities? Why neglect nature and engender constipation? Is it wisdom that makes constipation? Yea truly—An ounce of prevention (right living) is worth a pound of cure.

**PREVENTABLE HUMAN DISEASES NOT CONSIDERED:** We notice the program of the twelfth annual conference of Farmers' Institute Workers, held Thursday and Friday, October 14-15, 1909, at Purdue University, gives some space and time to preventable animal diseases and to preventable plant diseases. It seems to us it would have been well for the management also to have considered preventable diseases of the human family. The death rate and sick rate among farmers is 20 per cent. higher than it should be. The preventable diseases and preventable deaths from which they suffer cost them more than all of their losses from insects and from animal diseases.

We hope the next State Farmers' Institute will take up to some degree, the subject of "How to prevent disease in human beings on the farm." The money saving which can be made along this line is enormous and the saving in happiness and strength is incalculable.

**MY DAUGHTER HAS TYPHOID FEVER:** A gentleman at Saratoga, Ind., writes us as follows: "My daughter, 11 years old, has typhoid fever. She has been sick seven weeks, but her temperature is now normal and she is convalescing. My wife has been sick three days with symptoms of the same kind which brought my daughter down. I have three more children and wish to protect them if it is possible. Is there anything I can do for them to keep them from taking the same disease? What disinfectants shall be used? If there is anything I can give my family to ward off or mitigate the fever, or any disinfectants I could use, I would like to know all about it."

This is a type of letter frequently received from the people and we answer them all in about the same way. The correspondent is told there is no medicine which will prevent typhoid fever and warning is given against placing faith in medicines. We endeavor to make clear the fact that typhoid fever must be prevented and there is really little or no excuse for having it. Each correspondent receives a circular telling about the prophylaxis of typhoid fever, and opportunity is taken to enlist the correspondent in public health work and this is generally secured. The time to secure recruits in public health work is when the expense and misery of disease is brought home to the individual. We will probably learn some time not to put such unreasonable faith in medicines and turn to prevention.

\* \* \*

**HEALTH WORK IN GRANT COUNTY:** Recently Dr. O. M. Davis, County Health Commissioner of Grant County, called a meeting of all health officers and deputies and had a conference in regard to public health work. The following officers were present: J. E. Derbyshire, Van Buren; C. E. Vance, Gas City; J. T. Anderson, Swayzee; C. J. Overman, Marion; E. Trent Stout, Upland; W. M. Warren, Fairmount; and J. S. Whitson, Jonesboro. Dr. Davis explained carefully the rules governing health officers in corporations and he especially dwelt upon the necessity of carefully recording births, deaths and contagious diseases. He said the collecting of vital statistics was the first and most important duty of the health officer. In discussing improving sanitary conditions, Dr. Davis quoted Governor Marshall, who said in a speech, "Cleanliness is essential to Godliness." The quarantining of infectious diseases was gone over in all its phases. Disinfection was thoroughly discussed and the rules of the State Board of Health directing the specific processes of disinfection

were read and studied. Each city and town health officer was made a deputy county health commissioner. This gives him jurisdiction beyond the corporation lines of his city or town. It was decided to hold such a meeting every month with the county health commissioner in the chair, for as the resolution stated, "in order to compare notes and discuss matters pertaining to the care of the public health."

\* \* \*

**WHAT A DENTIST IS DOING:** Princeton, Indiana, has within its walls a live dentist. This live man has organized the dentists of the city and has instituted, without expense to the people, the important work of inspecting the teeth of school children. At the Lowell building in one day the teeth of sixty-eight children were examined and of that number only seventeen had sound teeth. The teeth of the remaining fifty-one were decayed more or less, and they will be repaired. The teachers are showing great interest in the work and instructions are being given to the children for the care of their teeth. The parents of the pupils, too, have begun to see the importance of the work, and whereas the dentists in the beginning were laughed at and the spitters on the corner joked about them, now they are being praised. However, the dentists do not care for the praise of the sidewalk spitters. This class of people cannot help onward any good cause by their praise or condemnation. They are simply neutral bodies in their community, except so far as distributing disease is concerned. In that line they are positive nuisances.

Dr. J. W. Roper is the dentist who has taken the lead in this important work. He says: "I feel that dental inspection is progressing quite satisfactorily, and I am quite sure that the teachers will bear me out in the statement that free dental inspection is doing great good for the children." Dr. Roper is State Chairman of the Dental Education and Oral Hygiene of the State Dental Association. As chairman of this committee he is trying to interest dentists in dental inspection throughout the State. The dentists who are assisting Dr. Roper in Princeton are J. A. Brumfield, Dr. W. T. Dorsey and Dr. Montgomery.

What a refreshing thing it is to find citizens who are desirous of helping little children. The very desire and especially the effort itself will lift these citizens up and make them better men, and the community and the children will be benefited. This conservation of human energy by caring for the teeth of little children is a matter the importance of which cannot be exaggerated.

CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM CERTAIN COMMUNICABLE DISEASES FOR SEPTEMBER, 1909.

#### NORTHERN SANITARY SECTION.

Total population .....	920,586
Total deaths .....	890
Death rate per 1,000 .....	11.7
Consumption, rate per 100,000 .....	91.4
Typhoid, rate per 100,000 .....	45.0
Diphtheria, rate per 100,000 .....	6.6
Scarlet fever, rate per 100,000 .....	3.9
Diarrheal diseases, rate per 100,000 .....	166.9

#### CENTRAL SANITARY SECTION.

Total population .....	1,089,818
Total deaths .....	1,163
Death rate per 1,000 .....	18.0
Consumption, rate per 100,000 .....	134.3
Typhoid, rate per 100,000 .....	60.4
Diphtheria, rate per 100,000 .....	19.0
Scarlet fever, rate per 100,000 .....	2.2
Diarrheal diseases, rate per 100,000 .....	117.5

#### SOUTHERN SANITARY SECTION.

Total population .....	722,147
Total deaths .....	607
Death rate per 1,000 .....	10.2
Consumption, rate per 100,000 .....	92.9
Typhoid, rate per 100,000 .....	74.3
Diphtheria, rate per 100,000 .....	16.8
Scarlet fever, rate per 100,000 .....	1.6
Diarrheal diseases, rate per 100,000 .....	101.3

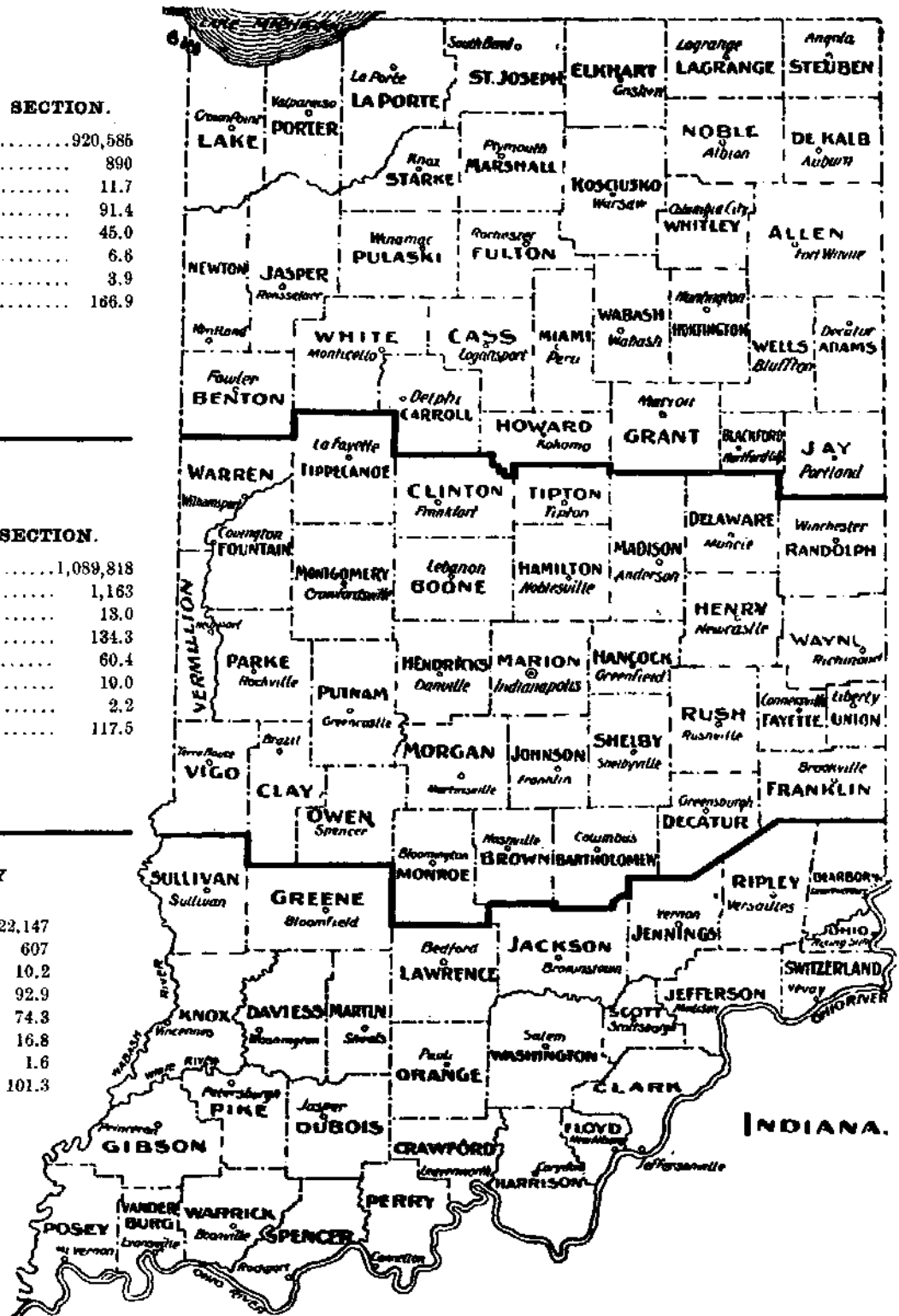


TABLE 1. Deaths in Indiana by Counties During the Month of September, 1909.

STATE AND COUNTIES.	Population, Estimated 34 Times School Census 1908.	Total Deaths Reported for September, 1909.	Annual Death Rate per 1,000 Population.	IMPORTANT AGES.										DEATHS FROM IMPORTANT CAUSES.															
				Stillbirths.	Under 1 Year.	1 to 4, inclusive.	5 to 9, inclusive.	10 to 14, inclusive.	15 to 19, inclusive.	20 Years and over.	Pulmonary Consumption.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping-Cough.	Pneumonia.	Diarrheal Diseases, under 5.	Cerebro-Spinal Meningitis.	Influenza.	Puerperal Septicemia.	Cancer.	Violence.	Smallpox.	Deaths in Institutions.		
State of Indiana.....	2,732,350	2,690	11.8	149	440	214	59	50	77	724	244	63	132	24	1	6	3	16	89	291	13	7	13	145	179	...	187		
Northern Counties.....	920,585	880	11.7	54	185	98	11	16	33	246	89	21	34	8	.....	3	3	1	18	120	2	3	6	51	51	...	51		
Adams.....	25,452	29	13.9	1	9	4	1	1	1	7	2	1	2	3					2	3	1			4	3		16		
Allen.....	89,579	75	10.2	4	15	1		2	6	19	12	1	3			1			2	5				6	3				
Benton.....	12,320	7	6.8	1	2					1	1	1													1				
Blackford.....	16,222	20	15.0	1	8	1		1	2	3	1	1							1	4					1				
Carroll.....	13,968	11	7.1	1	3					4	3	1							3	3									
Cass.....	35,231	37	12.8	2	4	1	1	2	2	7	4	1	2	1					1	1				2	3		7		
Delaware.....	24,503	23	11.4	2	2			2		8	1	1	5	1					1	1									
Elkhart.....	47,667	45	11.5	3	8					16	2	2	2						1	3				1	2		1		
Fulton.....	17,889	21	14.4	1	5	1	1	2	2	4	1	1	1						1	5				5	1		14		
Grant.....	57,239	49	10.4	3	5			2	1	21	2	2	2						2	5				4	2				
Howard.....	29,837	28	11.4	1	5	2	1	1	1	11	1	2	2				1		1	4			1	1	1				
Huntington.....	30,607	33	13.1	3	5			1	1	9	3	1							1	4				4	2				
Jasper.....	14,469	7	5.9	2	2	1				3	3	1							2	5				1	3				
Jay.....	27,156	26	11.6	10	1	1				3	1	1		3					1	4				1	3				
Kosciusko.....	28,189	28	11.2	1	8	1	1			9	2	2	1						1	4				3	2				
Lagrange.....	15,449	14	11.0	3	3			2	2	6	1	1							1	2									
Lake.....	63,444	89	17.1	8	26	21	2	3	3	7	6	3	2	2				1	29	7			1	14			6		
Laporte.....	56,007	52	11.3	4	16					17	5	3							2	1				2	1				
Marshall.....	25,067	22	10.7	3	3	2				9	2	2							3	4			1	1	2				
Miami.....	29,543	23	9.4	1	6					9	1	1							1	4			1	1	2				
Newton.....	10,612	6	6.8		2					4									2	2									
Noble.....	22,637	19	10.2	1	4	2				5			1						2	2			1		3				
Porter.....	20,965	22	12.8	3	5					9				1					3	3				1	1		1		
Pulaski.....	15,928	9	7.0	1	4	1				2									1	3									
Starke.....	12,404	17	16.7	3	4		1		1	3	4								2	2				2					
Stauben.....	13,359	14	12.7	3	1					5									1	1									
St. Joseph.....	72,387	78	13.1	5	18	8	1	3	1	12	10	2	3					1	15	4			1	3	4		5		
Wabash.....	28,119	28	12.1	2	3	1			2	11		3	2	1					2	2				1	1				
Wells.....	24,234	23	11.5	2	2	3	1	1		9	1								2	2				1	1				
White.....	18,490	19	12.5	2	2					9	2								1	1				2					
Whitley.....	16,922	18	12.9	2	2	2				5	1	1	1					1	2					3			1		
Central Counties.....	1,089,818	1,163	13.0	60	170	84	27	21	16	322	120	30	54	9	1	2	.....	5	51	105	7	2	5	69	78	...	109		
Bartholomew.....	26,338	22	10.1	1	3	3	1			8	2	1	2						1	1				3					
Boone.....	24,473	21	10.4	1	1	1	1			13	1	1							2	1					3				
Brown.....	10,034	3	3.6	1	1	1				1	1	1																	
Clay.....	37,150	38	12.4	2	9	3	1		1	8	4	1						1	3	3				2	2				
Clinton.....	27,478	30	13.3	1	7	3				6	2								3	5				1	4				
Decatur.....	18,147	21	14.1	1	1					10	4	3	1						1	2				2	2		4		
Delaware.....	50,859	48	10.3	4	11	1	1	1	2	8	5	3	5	1					1	5				3	2				
Fayette.....	12,271	12	11.9	1	1					4	1								1	2				2	1				
Fountain.....	19,374	23	14.5	1	5	4	1			8	3								1	5				2					
Franklin.....	15,743	9	6.9	1	1	1	1			3	1								1	1									
Hamilton.....	28,591	17	7.2	1	1	2	1	1		5			1						2	3									
Hancock.....	19,211	28	17.7	1	8	4	3	2		4	2	1	2	1					1	3				2	3				
Hendricks.....	20,447	19	11.3	1	4	1				7	2								2	3					1				
Henry.....	33,569	26	13.4	2	5	3	1		1	10	1	1							2	4					1				
Johnson.....	19,733	17	10.5	1	2					5	2		4					1	1	1				2	1				
Madison.....	71,141	66	11.3	8	10	4	2	1	2	11	9		1	1	1				6	1			1	3	6		1		
Marion.....	258,773	298	14.0	19	38	11	9	6	6	76	35	6	11	3		1		1	11	23			1	27	20		67		
Monroe.....	23,254	22	11.5	3	3	1	1			4	3								1	1				1	4				
Montgomery.....	27,146	33	14.8	2	3	3		1	1	11	4	1	2						4	3				2	2		2		
Morgan.....	22,421	22	11.9	1	1	3	1	2	1	7	1	1	3						4	4				1	1				
Owen.....	15,372	6	7.4		8	7				2	1	1												1					
Parke.....	22,876	33	17.5	2	8	7		1		6	2		4						6	2			1	1					
Putnam.....	20,037	18	10.9	1	5	2				4	3		2						2	1									
Randolph.....	26,238	28	12.0	1	8	1				11	3	1	1						4	1				1	1				
Rush.....	17,615	15	10.3		1	1			1	9	2								1	1				1	1	</			

TABLE 2. Deaths in Indiana by Cities During the Month of September, 1909.

CITIES.	Population Estimated at Times School Census, 1900.	Total Deaths Reported for September, 1909.	Rate per 1,000 Population.	IMPORTANT AGES.											DEATHS FROM IMPORTANT CAUSES.													
				Stillbirths.						65 Years and over.	Pulmonary Consumption.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping-Cough.	Pneumonia.	Diarrheal Diseases, under 5.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicemia.	Cancer.	Violence.	Smallpox.	Deaths in Institutions.	
					Under 1 Year.	1 to 4, inclusive.	5 to 9, inclusive.	10 to 14, inclusive.	15 to 19, inclusive.																			
Cities over 50,000 Population.	405,031	453	13.8	28	61	25	13	11	14	98	55	9	16	6	2	2	2	19	33	1	1	42	40		89			
Indianapolis	233,150	265	13.8	17	33	17	7	5	6	61	33	5	10	3	1	1	1	19	20	1	1	27	19		56			
Evansville	64,442	61	11.5	3	5	6	3	2	2	11	6	1	1	2				3	4			6	11		15			
Fl. Wayne	56,304	62	13.4	4	12	4	1	2	5	13	10		2					3	4			6	2		15			
Terre Haute	51,135	65	15.5	4	11	4	2	2	1	13	6	3	3	1			1	5	5			3	8		13			
Cities from 25,000 to 50,000 Population.	43,599	51	14.2	4	14	5	1	1		4	7	1	1					1	13			2	3		5			
South Bend	43,599	51	14.2	4	14	5	1	1		4	7	1	1					1	13			2	3		5			
Cities from 10,000 to 25,000 Population.	300,545	335	13.5	19	67	22	4	6	12	70	32	11	16	3			1	10	39	2	2	21	18		26			
Anderson	22,505	27	14.6	5	4	1	2	2	1	5	2		2	1					2			2	2					
Columbus	10,000	10	12.2		1					3		1	2					1										
East Chicago	10,879	25	27.7		9	6	1				3							1	10				6					
Elkhart	17,084	19	13.5	1	5	1				4	1		1						3			1						
Elwood	13,821	10	8.8		1	1			1	2	2		1						2				1					
Hammond	18,995	22	13.4	2	5	3			2	2	1			1					3			2			4			
Jeffersonville	12,000	16	16.2		2	2			1	3	4		2	1					1				3					
Kokomo	12,834	12	11.4	1	3	1				4			1						1			2			3			
Lafayette	20,223	33	19.4		3	1				13	2	1	4						2			5	1		7			
Laporte	10,004	17	20.7	2	1				1	7	2	2																
Lomaxport	16,730	23	16.7	1	4	1	1	1	2	3	2	1	1						2			1	3		2			
Marion	24,181	18	9.0		1	3			2	4	1								2									
Michigan City	20,000	23	18.0		2	7			1	3	3		2						5			1						
Muncie	23,118	20	10.5	2	6				1	4	2	1	2						1			1	2		3			
New Albany	23,003	20	10.6		3	2		2	3	3	3		3						2									
Peru	10,517	6	6.9							3		2																
Richmond	19,602	23	14.3	1	7	1			4	4	3								3			2						
Vincennes	13,947	11	9.6	1	4	1		1		1	1	1							1									
Cities from 5,000 to 10,000 Population.	166,859	191	13.9	8	39	16	2	2	4	54	15	7	8	1			3	8	21	4	2	12	10		7			
Alexandria	6,030	6	12.1		2	1				1								1	1									
Aurora	5,218	2	4.6		1					3	1																	
Bedford	7,672	7	11.1		1					1	1																	
Bloomington	7,829	9	14.0		1		1			1	1																	
Brazil	8,827	11	15.2	1	3				1	3	1								1			1	2		1			
Connersville	6,114	7	13.9							2	2		1						1			1						
Crawfordsville	6,492	11	20.6	1	2	2				2	1	1							2									
Frankfort	8,645	12	16.9		3	2				1	1								3			1	3					
Goshen	8,711	10	14.0	1	2	1				4		1																
Greensburg	5,288	8	18.4	1						6															4			
Hartford City	5,789	4	8.4		2					2																		
Huntington	9,938	11	13.5		3	2		1		2	2	1							3			1						
Linton	6,737	3	5.4		2					1	1		1															
Madison	7,945	7	10.7	1	1	1				5	3		1						2			1			1			
Mishawaka	9,989	13	15.8		2	1				5	1		2									1						
Mt. Vernon	6,072	7	14.0							1		1										1						
Princeton	6,394	12	22.8		2	1		1	1	1	5											1						
Seymour	5,593	3	8.5							2		1																
Shelbyville	8,246	12	17.7		3		1			2		1																
Valparaiso	5,771	3	6.3		1					2			1															
Wabash	8,592	13	18.4		2	2		1		5		1	1	1					3			1						
Washington	8,932	11	15.0	1	5	1				4									1									
Whiting	6,037	9	18.1	2	4	1				1																		
Cities under 5,000 Population.	134,276	165	14.9	8	29	20	4	8	2	40	13	2	16				1	1	27			9	15					
Angola	2,042	6	24.4		2	1				2	1								1									
Attica	2,989	5	19.2		1	1				1	1		2						1									
Auburn	3,171	5	19.5			1				1									1									
Bluffton	4,375	7	15.7	1		1				1																		
Butler City	1,547	2	15.7			1																						
Cannelton	2,032	1	6.0							1	1																	
Clinton	4,508	13	35.1		1	5		1		1	1		1						4									
Columbia City	3,066	3	11.9	1		1				1																		
Covington	1,974	2	12.3		1					2	1								1									
Decatur	4,385	7	19.4		2			1																				
Delphi	1,725	3	21.2		1	1						1							1									
Dunkirk	3,874	4	12.5		3				1				1															
Franklin	3,909	5	15.6	1						1	2																	
Garrett	4,273	4	11.4		2					1																		

# Mortality of Indiana for September, 1909.

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Population, Estimated 34 times School Census, 1908.	Total Deaths Reported for September, 1909.	Annual Death Rate per 1,000 Population.	Stillbirths.	Important Ages.										Deaths and Annual Death Rates per 100,000 Population from Important Causes.									
					Under 1.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		65 and Over.		Consumption.		Other Forms Tu- berculosis.		Typhoid Fever.		Dipha- theria.	
					Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.
State.....	2,732,550	2,860	11.8	149	440	17.5	214	8.5	59	2.3	50	1.9	77	3.0	724	28.8	244	108.9	63	28.1	132	58.9	24	10.1
Northern Counties.....	920,385	890	11.7	54	185	22.1	66	7.8	11	1.3	16	1.9	33	3.9	246	29.4	69	91.4	21	27.8	34	45.0	5	6.6
Central Counties.....	1,089,818	1,163	13.0	60	170	15.4	84	7.1	27	2.4	21	1.9	19	1.6	322	29.1	120	134.3	30	33.5	54	60.4	9	10.0
Southern Counties.....	722,147	907	10.2	35	85	14.8	64	11.1	21	3.6	13	2.2	26	4.5	156	27.2	55	92.9	12	20.2	44	74.3	10	16.8
All Cities.....	1,050,310	1,195	13.8	67	210	18.8	88	7.8	24	2.1	28	2.4	32	2.8	266	23.5	122	141.7	36	34.8	68	67.5	10	11.6
Over 50,000.....	405,031	453	13.6	28	61	14.3	25	5.8	13	3.0	11	2.5	14	3.2	98	23.0	55	165.6	9	27.1	16	48.1	6	18.0
25,000 to 50,000.....	43,599	51	14.2	4	14	29.8	5	10.6	1	2.1	1	2.1	1	.....	4	8.5	7	195.8	1	27.9	1	27.9	.....	.....
10,000 to 25,000.....	300,545	335	13.5	19	67	21.2	22	6.9	4	1.2	6	1.9	12	3.8	70	22.1	32	129.8	11	44.6	19	77.1	3	12.1
5,000 to 10,000.....	166,899	191	13.9	8	39	21.3	16	8.7	2	1.0	2	1.0	4	2.1	54	29.5	15	109.6	7	51.1	6	43.8	1	7.3
Under 5,000.....	134,276	165	14.9	8	29	18.4	20	12.7	4	2.5	8	5.0	2	1.2	40	25.4	13	118.1	2	18.1	16	145.3	.....	.....
Country.....	1,682,240	1,465	10.6	82	230	16.6	136	9.1	35	2.5	22	1.5	45	3.2	458	33.1	122	68.4	33	23.9	74	53.6	14	10.1

POPULATION BY GEOGRAPHICAL SECTIONS AND AS URBAN AND RURAL.	Deaths and Annual Death Rates per 100,000 Population from Important Causes.																							
	Croup.		Scarlet Fever.		Measles.		Whooping- Cough.		Pneumonia.		Diarrheal Diseases, Under Five.		Cerebro- Spinal Meningitis.		Influenza.		Puerperal Septicemia.		Cancer.		Violence.		Smallpox.	
	Number	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.	Number.	Death Rate.
State	1	.4	6	2.6	3	1.3	16	7.1	86	30.3	291	129.9	13	5.8	7	3.1	13	5.8	145	64.7	179	79.9		
Northern Counties.	1	1.1	3	3.9	3	3.9	3	3.9	18	23.8	126	166.9	2	2.6	3	3.9	6	7.9	51	67.5	51	67.5		
Central Counties.			2	2.2			5	5.5	51	67.0	105	117.6	7	7.8	2	2.2	5	5.5	69	77.2	78	87.3		
Southern Counties.			1	1.6			8	13.5	17	28.7	60	109.3	4	6.7	2	3.3	2	3.3	25	42.2	50	84.4		
All Cities			2	2.3			7	8.1	39	45.3	133	154.4	7	8.1	1	1.1	6	6.9	86	99.8	86	99.8		
Over 50,000			2	6.0			2	6.0	19	57.2	33	99.3	1	3.0	1	3.0	2	6.0	42	126.5	40	120.4		
25,000 to 50,000									1	27.9	13	363.7						2	55.9	3	83.9			
10,000 to 25,000								1	4.0	10	40.5	39	158.3	2	8.1			2	8.1	21	85.2	18	73.0	
5,000 to 10,000								3	21.9	8	58.4	21	153.5	4	29.2			2	14.6	12	87.7	10	73.1	
Under 5,000								1	9.0	1	9.0	27	245.3					2		9	81.7	15	136.2	
Country	1	.7	4	2.9	3	2.1	9	6.5	47	34.8	158	114.5	6	4.3	6	4.3	7	5.0	59	42.7	93	67.4		

## U. S. Department of Agriculture, Weather Bureau. Condensed Summary for Month of September, 1909.

V. H. CHURCH, SECTION DIRECTOR, INDIANAPOLIS, IND.

TEMPERATURE—IN DEGREES FAHRENHEIT.							
Section average.	Departure from the normal.	Extremes.					
		Station.	Highest.	Date.	Station.	Lowest.	Date.
64.2	-2.5	Rome.....	95	12 & 19	Cambridge City..... Paoli.....	28 28	28 28
PRECIPITATION—IN INCHES AND HUNDREDTHS.							
Section average.	Departure from the normal.	Extremes.					
		Station.	Greatest monthly amount.	Station.	Least monthly amount.	Station.	Least monthly amount.
2.68	-0.17	Columbus.....	4.95	Vevay.....	0.75	.....	.....