

## MONTHLY BULLETIN

## Indiana State Board of Health

(Entered as second-class matter at the Indianapolis Postoffice.)

VOLUME VIII.

INDIANAPOLIS, MAY, 1906.

NUMBER 5.  
25 Cents a Year.

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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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## SPECIAL MONTHLY REPORTS.

County Health Officers are directed to make Special Monthly Reports to the State Board of Health by the fifth of each month for the month preceding. This is extra to the regular personal monthly postal card report.

ABSTRACT OF MORTALITY STATISTICS  
FOR MAY, 1906.

Total number of deaths, 2,665; annual rate, 11.9. In the corresponding month last year, 2,556 deaths, rate 11.3. In the preceding month, 2,976 deaths, rate 13.2. Deaths by important ages were: Under 1 year, 346 or 13.8 per cent. of the total; 1 to 5, 139; 5 to 10, 44; 10 to 15, 53; 15 to 20, 93; 65 and over, 767, or 30.7 per cent. of the total. Some important causes of death were: Pulmonary tuberculosis, 318; other forms of tuberculosis, 58; typhoid fever, 40; diphtheria, 8; scarlet fever, 4; measles, 6; whooping cough, 35; pneumonia, 213; diarrhoeal diseases, 38; cerebro-spinal meningitis, 40; influenza, 14; puerperal fever, 6; cancer, 128; violence, 152.

SANITARY SECTIONS: THE NORTHERN SANITARY SECTION, population 887,832, reports 897 deaths; rate, 11.9. In the preceding month, 954 deaths; rate, 13. In the corresponding month last year, 863 deaths; rate, 11.4.

THE CENTRAL SANITARY SECTION, population 1,086,720, reports 1,110 deaths; rate, 12. In the preceding month, 1,285 deaths; rate, 14.4. In the corresponding month last year, 1,067 deaths; rate, 11.5.

THE SOUTHERN SANITARY SECTION, population 673,097, reports 658 deaths; rate, 11.5. In the preceding month, 737 deaths; rate, 13.3. In the corresponding month last year, 626 deaths; rate, 10.5.

REVIEW OF SECTIONS: The Southern Sanitary Section shows the lowest death rate. This is the first time this has happened during the year. We note that only the Central Section has a rate higher than the average for the whole State, the other two sections being the same or less.

CITIES: All cities, population 977,812, report 1,264 deaths; rate, 15.2. This is 3.3 higher than the average for the whole State. In the preceding month, 1,346 deaths; rate, 16.9. In the corresponding month last year, 1,138 deaths; rate, 13.7. The cities show a higher rate than the country in: tuberculosis, typhoid fever, diphtheria, measles, pneumonia, diarrhoeal diseases, cerebro-spinal meningitis, puerperal fever, cancer and violence. The country shows a higher death rate in influenza, which is a strange circumstance. The death rates for the following cities were: Indianapolis, 16.8; Evansville, 13.6; Ft. Wayne, 16.7; South Bend, 16.1; Terre Haute, 21.8; Muncie, 14.8.

**COUNTRY:** Population 1,670,737, reports 1,401 deaths; rate, 9.8. In the preceding month, 1,630 deaths; rate 11.8. In the corresponding month last year, 1,418 deaths; rate, 10.

## SUMMARY OF MORBIDITY AND MORTALITY FOR MAY.

Rheumatism was reported as the most prevalent malady. Tonsillitis was reported first in the preceding month. The order of prevalence was as follows: Rheumatism, tonsillitis, bronchitis, diarrhoea, whooping cough, influenza, measles, scarlet fever, intermittent and remittent fever, typhoid fever (enteric), pneumonia, pleuritis, inflammation of bowels, erysipelas, diphtheria and membranous croup, cholera morbus, smallpox, dysentery, cholera infantum, typho-malaria fever, cerebro-spinal meningitis, puerperal fever.

**SMALLPOX:** 112 cases reported from 14 counties with no deaths. In the corresponding month last year, 125 cases of smallpox were reported from 11 counties with 2 deaths. The counties reporting this disease were as follows: Adams, 10; Allen, 44; Clark, 10; Crawford, 2; Fayette, 1; Floyd, 12; Fulton, 1; Henry, 1; Marion, 4; Miami, 2; Putnam, 1; Vanderburgh, 5; Vigo, 1; Washington, 20.

**TUBERCULOSIS:** Total number of deaths from all forms, 376, 318 being pulmonary. Of the total number, 147 were males and 229 females. Of the males, 37 were fathers between the ages of 18 and 40, and left 77 orphans under 12 years of age. Of the females, 73 were mothers of the same age period as above, and left 149 orphans under 12 years of age. Number of homes invaded, 372. Total number of orphans created, 226. Number of widows created, 37; number of widowers, 73.

**TYPHOID FEVER:** 94 cases reported from 32 counties with 40 deaths. The disease was epidemic in the following counties: Clark, 15 cases; Vanderburgh, 11; Washington, 15.

**PNEUMONIA:** Pneumonia caused 213 deaths. In the corresponding month last year, 170. By this comparison, there is an increase of 43 deaths. Of the pneumonia deaths, 68 were under 5 years of age, 17 between 5 and 20, 32 between 40 and 60, 18 between 60 and 70, 32 from 70 to 80, and 16 were 80 and over.

**BY VIOLENCE:** Deaths by violence numbered 152, an increase over the preceding month of 28, and an increase of 12 over the corresponding month last year. Of the deaths by violence, 8 were murders, 25 suicides and the remainder accidental. Of the suicides, nine chose carbolic acid, three morphine, four potash and other poisons, four gunshots, and five hanging. Of the accidental deaths, 14 were caused by railroads, 1 by trolley-cars, 30 by crushing injuries, 11 by burns and scalds, 5 by gunshots, 13 by drowning, 5 by horses and vehicles, poisoning 12, lightning 4, rat-bite 1, not named 7.

## REPORT OF FOOD AND DRUG LABORATORY.

H. E. BARNARD, Chemist.

In this issue of the Bulletin we report the results of the analysis of 889 samples of foods and drugs.

The samples analyzed represent food products, drugs, etc., collected by the food and drug inspectors throughout the State, or sent to the laboratory by wholesalers, retailers and purchasers. Many samples of dairy products, milk, cream, butter, cheese, ice cream, etc., have been collected for the laboratory by the sanitary officers and Boards of Health of cities. One of the chief functions of the laboratory is to assist local health boards in securing for their constituents pure and wholesome food and we desire to extend to every city not possessing a municipal laboratory, the opportunity to regulate the quality of its milk by systematic inspection and analysis.

The work as reported covers a wide field and completes the analyses of the food products found on sale in the State prior to the establishment of the laboratory. All work now undertaken will be on samples placed in the hands of retailers since last fall and we expect that future reports will show a marked increase in percentage of purity. We are led to believe that this will be the case because of the hearty assurances of the wholesale trade that their goods are now prepared and labeled to comply with the pure food laws, and from the fact that many of the largest firms doing business in the State no longer purchase their goods upon the guarantee of the manufacturer, but, by analysis, satisfy themselves that the products are in every way legal and up to standard. This is particularly true in regard to spices, vinegars and syrups, three products heretofore heavily adulterated.

We are still at the mercy of the unscrupulous manufacturer of adulterated goods who does business outside the State, because we are unable to prevent him shipping his products over the line to our markets, if he can find dealers who, either through ignorance or desire to buy cheap goods, continue to patronize him.

Agents or salesmen who come into Indiana with such goods are liable to prosecution for violation of the pure food laws and the goods to seizure. Ignorance of the law, never a valid excuse, is now no protection in fraud, for food standards and rulings have been distributed widely and manufacturers and wholesalers both within and outside the State are fully informed as to their requirements.

Of the 889 samples of food products examined, since the last report 500 were pure and of standard quality, and 389 adulterated or below the legal standard, a percentage equal to 43.7 per cent. Of 75 samples of drugs analyzed 46 were pure and up to pharmacopeia standard, and 29 were adulterated. It must be remembered, however, that in collecting samples for analysis care is taken to purchase articles of a suspicious character, therefore the extent of adulteration of all classes of food and drug products is represented by a much smaller percentage.

We shall continue to publish names of illegal brands and shall consider such publication sufficient notice to the trade that the goods must not be sold.

Dealers carrying such goods in stock must arrange for their return to the jobbers or relabel them properly.

## BAKING POWDER.

Baking powder is a leavening agent now in general use which has taken the place of the cream of tartar and saleratus mixture formerly employed in raising bread. It acts in the same manner as the older preparation and leavens the bread by the formation within the loaf of carbon dioxid. Baking powder is composed of acid and alkaline constituents so prepared that when brought into contact with water a chemical reaction takes place between the acid and the alkaline carbonate with the resulting liberation of carbon dioxid.

The value of a baking powder depends, therefore, on the amount of gas liberated in the process of bread making. A good powder is one so compounded that the acid salt, which may be bitartrate of potassium, calcium acid phosphate, or alum, is present in just the quantity required to set free all of the carbon dioxid in the bicarbonate of soda, the alkali usually used. Normal baking powders will give 10 per cent. and over of their weight as gas. All powders producing less gas are deficient either because of deterioration by age or improper compounding.

In reporting the results we have given the percentage of carbon dioxid capable of being liberated in the process of baking, and have also designated the character of the powder. Several of the samples were not of the composition claimed for them and a large number, 25, or 64.1 per cent. were low in carbon dioxid. Probably many of the powders classed as illegal were up to the standard when packed, but had deteriorated with age. This can not be taken into consideration, however, either by the housewife or the chemist, and it becomes the duty of the manufacturer to recall his stock before it is so old as to be worthless. One sample contained less than 2 per cent. of available carbon dioxid, and a cook using this powder would have to employ at least 20 teaspoonsfuls to the quart of flour.

## BAKING POWDER—LEGAL.

Laboratory Number	Brand.	Manufacturer.	Where Collected.	Available Carbon Dioxide %	Remarks.
70	Jubilee.....	Canby, Ach & Canby, Dayton	Elwood....	13.8	Cream of tartar powder. Pure.
1208	Reliable.....	Grocers' Supply Co., Indianapolis	Princeton....	10.19	Alum phosphate powder. Pure.
1418	Club House.....	Franklin MacVeagh Co., Chicago	Huntington	10.62	Cream of tartar powder. Pure.
1613	American.....	E. Ottenthaler & Son, Louisville	New Albany..	10.72	Alum phosphate powder. Pure.

## BAKING POWDER—LEGAL—Continued.

Laboratory Number	Brand.	Manufacturer.	Where Collected.	Available Carbon Dioxide %	Remarks.
1719	Cream of Tartar.	Columbia Grocery Co., Indianapolis	Indianapolis	12.86	Cream of tartar powder. Pure.
3314	Home-Made .....	Wabash Baking Powder Co., Wabash	Columbus....	13.80	Phosphate powder. Pure.
3342	Good Luck.....	The Southern Mfg. Co., Richmond, Va.	Columbus....	14.70	Alum powder. Pure.
3303	Ladies' Friend .....	Canby, Ach & Canby, Dayton, O.	Columbus....	14.23	Phosphate powder. Pure.
3404	Fehring's.....	Wabash Baking Powder Co., Wabash	Columbus...	13.11	Alum phosphate powder. Pure.
3467	Midway.....	J. F. Lowe & Co., Columbus	Columbus....	10.97	Alum phosphate powder. Pure.
3458	Common Sense ..	Canby, Ach & Canby, Dayton	Columbus....	12.66	Alum powder. Pure.
3590	Monarch .....	Reid, Murdoch & Co., Chicago	Indianapolis	11.70	Cream of tartar powder. Pure.
3483	Faultless.....	Heckin Spice Co., Cincinnati	Columbus...	10.24	Phosphate powder. Pure.
4193	Rinne's.....	C. H. Rinne	Indianapolis	11.18	Phosphate powder. Pure.
4208	Royal .....	Lafayette	Columbus...	13.26	.....

## BAKING POWDER—ILLEGAL.

178	Clabber .....	Hallman Coffee Co., Terre Haute	Brazil.....	7.02	Alum phosphate powder. Low grade.
1678	Queen Flake.....	Northrop, Robertson & Currier, Lansing, Mich.	Salem.....	9.87	Phosphate powder. Below standard.
1681	Bon Bon.....	J. C. Grant Chemical Co., St. Louis	Salem.....	8.91	Alum powder. Low grade.
1749	Egg.....	Egg Baking Powder Co., New York	Indianapolis	8.52	Phosphate powder. Low grade.
3315	Kenton.....	Kenton Baking Powder Co., Cincinnati	Columbus....	7.11	Alum phosphate powder. Low grade.
3352	Bon Bon .....	J. C. Grant Chemical Co., St. Louis	Columbus....	8.42	Alum powder. Low grade.
3353	M. O'C.....	M. O'Connor & Co., Indianapolis	Columbus....	4.00	Alum phosphate powder. Very Low grade.
3354	Calumet.....	Calumet Baking Powder Co., Chicago	Columbus....	2.04	Alum phosphate powder. Very low grade.
3355	Jersey.....	Dayton Spice Mills Co., Dayton, O.	Columbus....	8.05	Alum powder. Low grade.
3384	Lion.....	Wabash Baking Powder Co., Wabash	Columbus....	11.89	No phosphate present. Pure but wrongly labeled.
3375	Bakers' Delight..	Grocers' Supply Co., Indianapolis	Columbus....	6.42	Phosphate powder. Low grade.
3376	Reliable.....	Eddy & Eddy, St. Louis...	Columbus....	7.80	Phosphate powder. Low grade.
3383	Olympia.....	Canby, Ach & Canby Co., Dayton, O.	Columbus....	5.06	Phosphate powder. Very low grade.
3415	Purity.....	Sheridan & Co., Pittsburgh	Columbus....	8.33	Phosphate powder. Low grade.
3417	Elk.....	Rethwisch & May, Columbus	Columbus....	5.70	Very low grade.

## BAKING POWDER—ILLEGAL—Continued.

## BEESWAX, WHITE—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Available Carbon Dioxide %.	Remarks.
3456	Cheer.	Hulman Coffee Co., Terre Haute	Columbus...	6.23	Phosphate powder. Low grade.
3458	Yukon.	Reid, Henderson & Co., Chicago	Columbus...	7.70	Alum phosphate powder. Low grade.
3460	Purity.	Sheridan & Co., Pittsburgh	Columbus...	4.72	Phosphate powder. Very low grade.
3459	Cameo.	Cameo Baking Powder Co., Chicago	Columbus...	1.91	Alum phosphate powder. Very low grade.
3569	Empress.	Pettis Dry Goods Co., Indianapolis	Indianapolis	9.25	Phosphate powder. Low grade.
3501	N. Y. Store's Phosphate	Pettis Dry Goods Co., Indianapolis	Indianapolis	4.44	Alum phosphate powder. Very low grade.
3606	Whipped Cream.	Geo. J. Hammel, Indianapolis	Indianapolis	8.76	Alum phosphate powder. Low grade.
3653	Pure Cream	Tartar M. J. Stewart, Indianapolis	Indianapolis	5.32	Alum phosphate powder. Very low grade.
3716	Imperial.	Criterion Mfg. Co., Indianapolis	Indianapolis	6.84	Alum powder. Low grade.

## BEESWAX.

Beeswax is prepared by melting the honey free comb made by the bees, and skimming and filtering off the impurities. It is very liable to adulteration, as is shown by the results of our analyses. Of 66 samples of yellow or natural beeswax, 45 contained paraffin in quantities ranging from 10 to 100%, while but 2 out of 70 samples of bleached or white wax were free from paraffin.

Beeswax is worth 50 cents a pound, paraffin but 10 cents, a difference which readily explains the heavy adulteration of this article.

## BEESWAX, WHITE—LEGAL.

Laboratory Number.	Retailer.	Where Collected.	Paraffin.
562	Bunting Drug Co.	Terre Haute...	None.
2234	Heinemann & Sievers.	Valparaiso...	None.

Laboratory Number.	Retailer.	Where Collected.	Paraffin.
515	Fred Keller.	Brazil...	75 Per Cent.
582	J. S. Madison.	Terre Haute...	Pure paraffin.
529	Geo. J. Hoffman.	Terre Haute...	30 Per Cent.
613	Baur.	Terre Haute...	20 "
631	G. Heiss.	Terre Haute...	85 "
634	H. J. Werkes.	Terre Haute...	20 "
673	W. E. Watson.	Vincennes...	85 "
657	R. G. Moore.	Vincennes...	20 "
701	C. S. Miller.	Vincennes...	85 "
742	H. G. May.	Princeton...	25 "
769	E. S. Clapp.	Washington...	15 "
795	H. J. Lindenmann.	Washington...	80 "
804	J. N. Jones.	Washington...	20 "
817	C. Knightly.	Oakland City...	15 "
832	Meek & Albers.	Evanaville...	20 "
920	W. H. Fogus.	Mt. Vernon...	20 "
934	Dawson & Boyce.	Mt. Vernon...	20 "
949	D. H. Rosenbaum.	Mt. Vernon...	95 "
951	Porter, The Druggist.	Porter...	80 "
993	Blue Drug Store.	Porter...	90 "
1017	Bradle Bros.	Wabash...	20 "
1034	R. E. Clark.	Wabash...	15 "
1053	Fowler & Berlin.	Wabash...	Pure paraffin.
1054	Butterbaugh & Co.	Wabash...	95 Per Cent.
1079	M. Kaylor.	Huntington...	20 "
1097	Schaefer & Schaefer.	Huntington...	16 "
1110	Bradley Bros.	Huntington...	Not a pure wax.
1130	J. C. Nutzoll.	Pt. Wayne...	20 Per Cent.
1193	H. G. Scammons.	Pt. Wayne...	75 "
1816	Ashton Stamon.	Auburn...	20 "
1829	H. B. McCord.	Auburn...	15 "
1859	Housworth Bros.	Elkhart...	20 "
1924	H. N. Jenner.	Goshen...	20 "
1935	G. W. Rule.	Goshen...	15 "
1947	Public Drug Store.	South Bend...	25 "
1980	Myers' Drug Store.	South Bend...	30 "
2026	R. P. Milton.	Laporte...	15 "
2030	D. C. Peters.	Laporte...	20 "
2043	R. W. Meisenor.	Laporte...	15 "
2052	J. M. Callendar.	Laporte...	15 "
2055	T. H. Boyd & Co.	Laporte...	15 "
2092	Koplinsky & Moran.	Michigan City...	25 "
2140	J. W. Weis.	Hammond...	10 "
2153	M. Kolb.	Hammond...	10 "
2199	W. C. Lethermann.	Valparaiso...	15 "
2239	Ben Fisher.	Logansport...	10 "
2271	W. H. Porter.	Logansport...	10 "
2282	Red Cross Pharmacy.	Logansport...	10 "
2310	M. M. Murphy.	Delphi...	35 "
2319	Lytle & Orr.	Delphi...	35 "
2338	Ragan Bros.	Lafayette...	70 "
2383	Schultz & Boswell.	Anderson...	Pure paraffin.
2410	Anderson Drug Store.	Anderson...	Pure paraffin.
2437	City Drug Store.	Anderson...	100 Per Cent.
2451	Cassill Bros.	Anderson...	100 "
2471	Buck & Brickleay.	Muncie...	Pure paraffin.
2510	E. P. Whitney.	Muncie...	30 per cent.
2552	Physicians' Drug Store.	Muncie...	Pure paraffin.
2564	W. H. Birley.	Alexandria...	Pure paraffin.
2650	F. L. Taylor.	Elwood...	100 Per Cent.
2675	Joy Bros.	Kokomo...	Pure paraffin.
2903	L. Mehlig.	Kokomo...	90 Per Cent.
2718	Hollowell & Ryan.	Tipton...	10 "
2773	J. O. Lindsay.	Indianapolis...	80 "
2947	Weber Drug Co.	Noblesville...	80 "
3530	Will E. Axline & Co.	Noblesville...	95 "
3544	A. G. Baldwin.	Noblesville...	95 "

## BEESWAX, YELLOW—LEGAL.

Laboratory Number.

Retailer.

Where Collected.

580	G. Reiss	Terre Haute
555	H. J. Werker	Vincennes
883	R. G. Moore	Vincennes
850	John Lovel & Son	Evansville
921	W. H. Fagus	Mt. Vernon
933	Dawson & Boyce	Mt. Vernon
977	Porter, The Druggist	Peru
1037	R. E. Clark	Wabash
1080	M. Kaylor	Huntington
110	Bradley Bros.	Huntington
1615	Ashton Staman	Auburn
1630	H. B. McCord	Auburn
1643	H. M. Phillips	Elkhart
1661	Housworth Bros.	South Bend
1948	Public Drug Store	South Bend
2023	P. Milton	Laporte
2032	D. C. Peters	Michigan City
2091	Kaplansky & Moran	Lafayette
2322	Ragan Bros.	Lafayette
2384	Schultz & Boswell	Indianapolis
2669	E. H. Wilson	

## BEESWAX, YELLOW—ILLEGAL.

505	S. Herr	Brazil	70 per cent.
516	Fred Keller	Brazil	70 " "
564	Baumot Drug Co.	Terre Haute	70 " "
576	J. S. Madison	Terre Haute	70 " "
602	C. W. J. Hoffman	Terre Haute	50 " "
614	Baur & Co.	Terre Haute	70 " "
672	W. C. Watson	Vincennes	Not pure wax.
705	C. S. Miller	Vincennes	75 per cent.
732	E. Shoptaugh	Princeton	Not pure wax.

## BOTTLED BEVERAGES.

The April Bulletin contained a discussion of the summer drink problem, and analytical data on many samples of beers, ginger ales and carbonated soft drinks. In this number we continue work in this line with analyses of grape juices, lime juice, cider, root beers, etc.

## CIDERS—ILLEGAL.

Laboratory Number.

Brand.

Manufacturer.

Where Collected.

Sp.Gr.

Alcohol.

Acids.  
Total  
Acidic.  
Acetic.Polarization.  
Direct.

Invert.

Per Cent.  
Sucrose.Milligrams  
SO<sub>4</sub>/liter.Extract per  
100 c. c.Salicylic  
Acid.Benzoe  
Acid.

Sacharin.

Ash, grams  
per 100 c. c.Alkalinity  
per 100 c. c.  
of HCl.

Remarks.

4253	Extra Dry	Hirsch Bros., Louisville	Indianapolis	1.0353	.21	.67	.021	-32.6	-33.8	.....	14	13.20	-	+	+	.301	32	Adulterated with benzoic acid.
4281	Duffy's	American Fruit Produce Co., Rochester, N.Y.	Indianapolis	1.0527	.49	.42	.030	-21.2	-31.0	.....	14	12.70	-	+	+	.285	30	Adulterated with benzoic acid.
4342		J. Metzger Co., Indianapolis	Indianapolis	1.0450	.14	.35	.003	+27.0	-14.0	8.03	.....	12.20	+	+	+	.317	37	Artificial.
4352		S. R. & T. C. Matt, New York City	Indianapolis	1.0610	.14	.90	.024	-34.0	-16.2	.....	26	14.96	+	+	+			Adulterated with salicylic acid.

## BEESWAX, YELLOW—ILLEGAL—Continued.

Laboratory Number.

Retailer.

Where Collected.

Paraffin.

745	H. G. May	Princeton	70 per cent.
767	F. S. Clapp	Washington	75 " "
814	C. Kightly	Oakland City	80 " "
878	Meek & Albers	Evansville	80 " "
948		Mt. Vernon	5 " "
1021	Bradley Bros.	Wabash	Not pure wax.
1062		Wabash	1 per cent.
1069	Butterbaugh & Co.	Huntington	70 " "
1100	Schaefer & Schaefer	Ft. Wayne	10 " "
1129	J. C. Nutzell	Ft. Wayne	80 " "
1194		Goshen	5 " "
1927	H. N. Jenner	Goshen	Not pure wax.
1954	G. W. Ruler	Laporte	15 per cent.
2014	F. W. Meissner	Hammond	15 " "
2139		Hammond	30 " "
2158	M. Kolb	Valparaiso	Not pure wax.
2215	Heineiman & Sievers	Logansport	Dirty.
2267		Logansport	85 per cent.
2380	Red Cross Pharmacy	Delphi	10 " "
2391		Lafayette	80 " "
2431		Anderson	80 " "
2453	Cassell Bros.	Anderson	Not pure wax.
2468	Buck & Brickley	Muncie	75 per cent.
2511	E. P. Whainey	Muncie	10 " "
2524	V. E. Silverburg	Elwood	70 " "
2614	Stringfellow & Co.	Elwood	70 " "
2655	F. L. Saylor	Alexandria	70 " "
2665	W. H. Bireley	Kokomo	Pure paraffin.
2688	L. Mehlitz	Kokomo	70 per cent.
2734	Hutchings & Murphy	Tipton	70 " "
2772	J. C. Lindsay	Tipton	80 " "
2787	Moore Bros.	Indiana	80 " "
2936	I. N. Heims	Indiana	80 " "
2953		Indianapolis	10 " "
3206	C. L. Mitchell	Noblesville	80 " "
3345	A. G. Baldwin	Noblesville	95 " "

All of the samples of cider analyzed were illegal. Two were preserved with benzoate of soda, one with salicylic acid. All of the root beers and root extracts were of good quality.

Single samples of raspberry vinegar, orange and strawberry fruit syrup showed in each case the presence of either benzoate or salicylate of soda.

## LIME JUICES—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Sp.Gr.	Alcohol.	Acids.		Polarization.		Per Cent. Sucrose.	Milligrams SO <sub>4</sub> per liter.	Extract per 100 c.c.	Salicylic Acid.	Benzic Acid.	Saccharin.	Ash, grams per 100 c.c.	Alkalinity n per 100 c.c. to HCl.	Remarks.
						Citric.	Acetic.	Direct.	Invert.									
4232	Ross's Brand	W. A. Ross & Bro., Belfast, Ireland	Indianapolis	5.46	.024	0.0	.....	.....	.....	13	.....	.....	—	—	—	—	Pure.	
4245	Montserrat	Evans Sons & Co., Liverpool, Eng.	Indianapolis	5.40	.260	0.0	.....	.....	.....	25	.....	.....	—	—	—	—	Pure.	
4351	Lemon Juice	C. C. Brandt & Co., San Diego, Cal.	Indianapolis	5.13	.250	0.0	.....	.....	.....	.....	.....	.....	—	—	—	—	Pure.	

## LIME JUICES—ILLEGAL.

3753	Rose	L. Rose & Co., London, Eng.	Indianapolis	5.30	.060	0.0	.....	.....	.....	104	6.455	—	—	—	2.38	.....	Adulterated with sulphuric acid.
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## GRAPE JUICES—LEGAL.

Laboratory Number.	Brand	Manufacturer.	Where Collected.	Sp.Gr.	Alcohol.	Acids.		Polarization.		Per Cent. Sucrose.	Milligrams SO <sub>4</sub> per liter.	Extract per 100 c.c.	Salicylic Acid.	Benzic Acid.	Saccharin.	Ash, grams per 100 c.c.	Alkalinity n per 100 c.c. to HCl.	Remarks.
						Tar- taric.	Acetic.	Direct.	Invert.									
3599	Robertson's	Layton Vinegar Co., Layton, Mich.	Indianapolis	1.0764	0.0	1.075	.11	-14.0	-7.5	.....	5.12	8.90	—	—	—	—	—	Pure.
4444		Fremont Grape Juice Co., Fremont, Ohio	Indianapolis	1.0726	.07	1.28	.012	-23.2	-20.7	.....	34.0	20.46	—	—	—	—	—	Pure.

## GRAPE JUICES—ILLEGAL.

1432	Concord	Fremont Grape Juice Co., Fremont, Ohio	Huntington	1.0765	.14	.55	.012	-22.0	-22.2	.....	20	18.78	+	—	—	27	24	Adulterated with salicylic acid.
3755	Catawba	Purity Bottling Co., Cincinnati, O.	Indianapolis	1.0779	.28	1.70	.048	-28.0	-25.9	.....	405	18.81	—	—	—	29	20	Adulterated with sulphuric acid.
4270	P. B. Co.	Purity Bottling Co., Cincinnati, O.	Indianapolis	1.0693	.42	.89	.114	-28.4	-27.9	.....	820	16.70	—	—	—	35	28	Adulterated with sulphuric acid.

## ROOT BEERS—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Sp.Gr.	Immersion Reading.		Alcohol.	Polarization.		Per Cent. Sucrose.	Total as Lactic Acid.	Volatile Acetic Acid.	Extract per 100 c.c.	Ash per 100 c.c.	Mg. SO <sub>4</sub> per liter.	Salicylic Acid.	Benzic Acid.	Saccharin.	Remarks.
					Distillate.	Extract.		Direct.	Invert.										
444	Blanke's Tonic	C. F. Blanke & Co., St. Louis, Mo.	Washington	1.0272	14.9	42.1	.14	-4.8	-7.0	.....	1.57	.12	70.38	.....	40.90	—	—	Pure.	
4275	Hires	The Chas. Hires Co., Malvern, Pa.	Indianapolis	1.0771	9.0	77.1	0.6	-7.6	-8.8	.....	0.29	.303	7.903	.060	10.24	—	—	Pure.	
4276	Hires	The Chas. Hires Co., Malvern, Pa.	Indianapolis	1.0493	14.5	77.1	0.0	-22.0	-18.9	.....	0.14	.38	20.42	.002	10.0	—	—	Pure.	
4280	Richelieu	Sprague, Warner & Co., Chicago, Ill.	Indianapolis	1.0493	14.5	77.1	0.0	-14.6	-11.6	.....	0.14	.38	14.28	.002	7.68	—	—	Pure.	

## LAR BAR—ILLEGAL.\*

4443			Indianapolis	1.0050	—	—	.42	+ 7.0	+ 3.8	.....	0.891	.005	1.55	.005	7.0	—	—	+	Adulterated with Saccharin.
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\*A temperance beer.

## MISCELLANEOUS SUMMER DRINKS—ILLEGAL.

Laboratory Number.	Article.	Manufacturer.	Where Collected.	Polarization.		Mg. SO <sub>2</sub> per Liter.	Sucrose.	Acid as Acetic.	Color.	Benzote of Sodium.	Salicylic Acid.	Remarks.
				Direct.	Invert.							
4223	Raspberry Vinegar	Gordon & Delworth, New York	Indianapolis	+80.0	.....	20.48	.....	1.57	Natural	—	+	Adulterated with salicylic acid.
4279	Fruit Syrup	Curtis, Moore & Co., Boston, Mass.	Indianapolis	-16.0	-14.1	12.8	.....	.....	Aulin	+	—	Adulterated with benzote of soda.
4445	Orangeade	.....	Indianapolis	+56.4	-17.2	69.12	55.8	.....	Natural	+	—	Adulterated with benzote of soda.

## CANNED FRUITS.

The canned fruits, like the canned vegetables, were as a class, of good quality. None of the samples analyzed contained preservative or artificial sweeteners. Fruits put up in glass, on the contrary showed a heavy adulteration, amounting to over 80 per cent. The report for January showed the use of preservative and color to be nearly universal in goods put up in glass packages.

## CANNED FRUITS, CHERRIES—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Wt. Cont. in Grams.	SO <sub>2</sub> Mgs. Per Liter.	Color.	% Syrup.	Preservative.
1747	Pitted.	Curtice Bros. & Co., Rochester, N. Y.	Indianapolis	699	0.0	Natural.	46	None.
3585	White Horse	Reid, Murdock & Co., Chicago	Indianapolis	593	0.0	Natural.	37	None.
3687	Algonquin	Fort-Stennis Co., Rome, N. Y.	Irvington ....	636	0.0	Natural.	33	None.
3688	White Seal	Corbin Sons & Co., Chicago	Irvington ....	705	0.0	Natural.	33	None.

## BLACKBERRIES—LEGAL.

297	Fredonia Beauty.	Fredonia Packing Co., Fredonia, N. Y.	Martinsville	691	0.0	Natural.	38	None.
1759	Jumbo	Miller Bros. & Co., Baltimore	Indianapolis	519	0.0	Natural.	52	None.

## BLACK RASPBERRIES—LEGAL.

3592	Monarch.	Reid, Murdock & Co., Chicago, Ill	Indianapolis	632	0.0	Natural.	32	None.
3711	American	Kidwell Bros. & Co., Baltimore	Irvington ....	538	0.0	Natural.	50	None.

## MISCELLANEOUS CANNED FRUITS—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	% Syrup.	SO <sub>2</sub> Mgs. Per Liter.	Color.	Preservative.
1740	Jones' Favorite Apple Sauce.	W. N. Clark & Co., Rochester, N. Y.	Indianapolis	60.8	0.0	.....	None.
1741	Table Preserves, Strawberries.	Curtice Bros., Rochester, N. Y.	Indianapolis	40.0	0.0	Natural.	None.
3027	Strawberries	Miller Bros. & Co., Baltimore, Md.	Indianapolis	76.0	0.0	Natural.	None.
3679	Monogram Apricots	J. C. Perry & Co., Indianapolis	Irvington ....	61.0	0.0	.....	None.
3088	Hartland Fancy Yellow Peaches	Corbin Sons & Co., Chicago	Irvington ....	32.0	0.0	.....	None.

## CANNED GOODS, VEGETABLES.

One of the leading staples of the modern grocery store and an essential of every well-stocked larder is an assortment of canned vegetables. These goods are put up in tin and sterilized by heat and will keep indefinitely in any climate, thus providing the table with apparently fresh vegetables when they are long out of season or can not be obtained. Of 20 samples of sweet corn analyzed, 14 were pure, free from preservative, saccharin or bleach. Five contained saccharin and one sample was a field corn boiled until soft and mixed with corn meal gruel. It was solid in the can and possessed none of the qualities of a sweet corn. Canners and packers are accustomed to regulate the value of their output by increasing or diminishing the quantity of water in which the goods are packed. The least quantity of water found was 61% and the largest amount 82.6%. That is, the first sample contained 39% of solid matter, the second 17.4%, or less than one-half as much. The weight of the contents of the cans varied from 567 to 616 grams.

## CANNED GOODS—SWEET CORN—ILLEGAL.

Of ten samples of canned peas examined five were pure and five adulterated. One sample was a "soaked" pea, that is, made by swelling up dried peas and canning them as fresh, though it is obvious that goods so packed lack the fresh succulent flavor which makes the vegetable desirable.

Four samples contained saccharin. Some years ago saccharin was extensively used by packers, but at present no up-to-date house relies on this coal tar sweetener as a substitute for sugar. None of the peas were colored with salts of copper. The use of copper in greening vegetables is not an American trick and most of the goods so colored are of French origin.

All of the canned tomatoes were pure, free from added color and preservative.

Two of the three baked beans were pure. One contained saccharin. The same ratio of adulteration was found in the canned beans, one sample of which was sweetened with saccharin.

Four of the six samples of mushrooms were illegal, two because of the presence of sulphurous acid, one because it was sour and one sample consisted of pieces and stems.

Two of the five samples of asparagus contained small quantities of sulphurous acid.

## CANNED GOODS—SWEET CORN—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Wholesaler.	Where Collected.	Wt. of Content of Corn in Gms.	Water Per Cent.	SO <sub>2</sub> Mgs. per liter.	Acidity $\text{H}_2\text{O}_2$ c.c. to Na OH per 100 c.c.	Preservatives.
1722	"Bindi" .....	The Wayneville Can Co. Wayneville, O.	Indianapolis.	552	.....	0.0	12.0	.....
1716	"Betty's Hulled "green" .....	A. E. Betty Can Co. Dayton, O.	Indianapolis.	605	61.0	0.0	16.0	.....
3241	"Empire" .....	Winters & Prophet, Mt. Morris, N. Y.	Indianapolis.	580	81.8	0.0	15.6	.....
3253	"Swain's Best" .....	C. W. Swain Can Co. Salina, O.	Indianapolis.	585	76.4	0.0	20.0	.....
3273	"Logan Elm" .....	Scioto Canning Co. Circleville, O.	Indianapolis.	622	75.8	0.0	13.2	.....
3291	"Summer Garden" .....	Chambers Can Co. Lewis Creek, Ind.	Indianapolis.	602	82.6	0.0	15.0	.....
3297	"Holly" .....	Walsh-Boyle Co., Chicago.	Indianapolis.	575	78.0	0.0	13.2	.....
3596	"Cording's Choice" .....	Coal Creek Can Co. Wingate, Ind.	Indianapolis.	580	77.8	0.0	12.0	.....
3638	"Delicious" .....	Chambers Can Co. Lewis Creek, Ind.	Indianapolis.	602	81.0	0.0	12.8	.....
3639	"El Mar" .....	Brinkmeyer, Kuhn & Co. Indianapolis.	Indianapolis.	578	76.2	0.0	12.8	.....
3667	"Silver Dollar" .....	Silver Creek Preserv. Co. Silver Creek, N. Y.	Indianapolis.	567	74.0	0.0	13.6	.....
3681	"Emerald" .....	Portland Packing Co. Portland, Me.	Irvington ....	589	79.1	0.0	12.0	.....
3682	"Fame" .....	Grafton Johnson Co. Greenwood.	Irvington ....	584	78.6	0.0	14.0	.....
3690	"Algonquin" .....	Ft. Stanwix Can Co. Rome, N. Y.	Irvington ....	566	80.6	0.0	8.0	.....

Laboratory Number	Brand.	Manufacturer or Wholesaler.	Where Collected.	Wt. of Content of Corn in Gms.	Water Per Cent.	SO <sub>2</sub> Mgs. per liter.	Acidity $\text{H}_2\text{O}_2$ c.c. to Na OH per 100 c.c.	Preservatives.
1726	"Winore Kernelled" .....	Winore Can Co. Dayton, O.	Indianapolis.	616	71.5	0.0	24.0	Saccharin.
1751	"Premier" .....	Francis, Leggett & Co. New York.	Indianapolis.	597	79.1	0.0	12.0	"
3588	"Wish Bone" .....	J. F. Humphrey Co. Bloomington, Ill.	Indianapolis.	580	78.1	0.0	.....	"
3623	"Holly" .....	Walsh, Boyle & Co. Chicago.	Indianapolis.	579	72.8	0.0	15.6	"
3708	"King" .....	Grafton Johnson. Greenwood, Ind.	Irvington ....	609	79.2	1.3	.....	"
3254	"Cook's Delight" .....	Warrensburg Can. Co. Warrensburg, Ill.	Indianapolis.	568	79.9	0.0	2.8	Not a sweet corn.

\*Made from field corn and corn meal.

## CANNED PEAS—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Per Cent. H <sub>2</sub> O	Wt. Cont. in Gms.	SO <sub>2</sub> Mgs. per Liter.	CCl <sub>4</sub> Na OH per 100 Gms.	Preservatives.	Remarks.
3294	Noble .....	Yale Canning Co. Yale, Mich.	Indianapolis.	45	601	0.0	17.0	.....	
3295	Silver Dollar .....	.....	Indianapolis.	33	616	0.0	21.5	.....	
3296	Yale Pride .....	Yale Canning Co.. Yale, Mich.	Indianapolis.	42	569	0.0	20.4	.....	
3588	Pettis Own .....	.....	Indianapolis.	45	601	0.0	16.4	.....	
3489	Polks Best .....	J. T. Polk Co. Greenwood, Ind.	Irvington ....	34	581	0.0	10.2	.....	Hard.

## CANNED PEAS—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer or Wholesaler.	Where Collected.	Per Cent. H <sub>2</sub> O	Wt. Cont. in Gms.	SO <sub>2</sub> Mgs. per Liter.	CCl <sub>4</sub> Na OH per 100 Gms.	Preservatives.	Remarks.
3274	Standard .....	Martinsville Can'g Co., Martinsville	Indianapolis.	44	594	0.0	12.0	Saccharin..	
3293	Calumet .....	Ascan Baine Co., Baltimore	Indianapolis.	47	575	0.0	9.6	.....	Soaked Peas
3623	Little Hoosier .....	J. C. Perry & Co., Indianapolis	Indianapolis.	50	588	0.0	8.0	Saccharin..	
3625	Silver Dollar .....	Silver Creek Preserve Co., Chautauqua, N. Y.	Indianapolis.	44	600	0.0	11.2	Saccharin..	
3709	Bay View, Early June .....	Bay View Can. Co., Huron, N. Y.	Irvington ....	43	598	0.0	24.0	Saccharin..	Rotten

## CANNED GOODS—TOMATOES—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Wt. Cont.	Per Cent. H <sub>2</sub> O	Per Cent. Water.	SO <sub>2</sub> Mgr. Per Liter.	Color.	Preservatives.
3235	Buffet	W. T. Bacon Co., Indianapolis	Indianapolis	932	94.2	0.0	Natural	None.	
3272	Standard	Martinsville Canning Co., Martinsville, Ind.	Indianapolis	967	94.8	0.0	Natural	None.	
3292	Cadet	J. C. Perry & Co., Indianapolis	Indianapolis	917	93.6	0.0	Natural	None.	

## CANNED GOODS—BAKED BEANS—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Preservatives.
1758	Phoenix	Schnull & Co., Indianapolis	Indianapolis	None.
3630	Polk's Best	J. T. Polk, Greenwood, Ind.	Irvington	None.

## CANNED GOODS—BAKED BEANS—ILLEGAL.

3624	May Day	Greenwood Packing Co., Greenwood, Ind.	Indianapolis	Contains Saccharin.
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## CANNED BEANS—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Per Cent. H <sub>2</sub> O	Wt. Cont. in Grams.	SO <sub>2</sub> Mgr. Per Liter.	CCN NAOH Per 100 Grams.	Preservatives.
1754	Golden Wax	Curtice Bros., Rochester, N. Y.	Indianapolis	42	559	0.0	13.2	.....
3629		John Fisher & Co., Baltimore, Md.	Indianapolis	38	673	0.0	36.0	.....

## CANNED BEANS—ILLEGAL.

3587	Monarch	.....	Indianapolis	23	530	0.0	10.4	Saccharin
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## CANNED GOODS, MUSHROOMS—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	SO <sub>2</sub> Mgr. Per Liter.	Remarks.
4450	Champignons, Cr. Choix	.....	N. Y. Store	0	Legal.
4451	Champignons, Bland's Extra	.....	N. Y. Store	0	.....

## CANNED GOODS, MUSHROOMS ILLEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	SO <sub>2</sub> Mgr. Per Liter.	Remarks.
3760	.....	Louis Freres & Co., France	Indianapolis	80.0	Preserved with sulfites. Corroded top.
3761	.....	.....	Indianapolis	14.8	Contains sulfites.
3763	.....	Rodier Fils & Co., Bordeaux	Indianapolis	0	Corroded top. Sour.
4449	.....	Vallet & Co., Bordeaux, France	Indianapolis	0	Pieces and stems.

## CANNED GOODS, ASPARAGUS—LEGAL.

Laboratory Number.	Brand	Manufacturer or Retailer.	Where Collected.	SO <sub>2</sub> Mgr. Per Liter.
1738	Ceres	M. C. Shea & Co., Courtland Canning Co., San Francisco, Cal.	Indianapolis	0.0
3628	C. C. C.	.....	Indianapolis	0.0
3691	Phoenix	Schnull & Co., Indianapolis	Irvington	0.0

## CANNED GOODS, ASPARAGUS—ILLEGAL.

1743	Signature	Bicknell Asparagus Canning Co., Bouldin Island, Cal.	Indianapolis	5.10
3784	.....	Corvilles Pk. Co., San Francisco, Cal.	Indianapolis	7.70

## CONDENSED MILK.

Condensed milk is the product prepared by evaporating fresh milk in vacuum pans, adding cane sugar and preserving in tin cans by proper sterilization.

Unsweetened condensed milk is now largely sold under the name "Evaporated Cream." It possesses none of the characteristics of cream, except its consistency, and the advertisements of the product are often misleading and false. The term "Evaporated Cream" is not a legal name, unless modified by the phrase "An Unsweetened Condensed Milk," placed under the title in plain characters.

Of the eight samples examined one had a fat content of 6.60% and was evidently made from milk containing but 2.71% of fat.

#### UNSWEETENED CONDENSED MILK—PURE.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Per Cent. Fat.	Per Cent. Fat in Original Milk.	Solids.	Ash.	Number Times Condensed.	Remarks.
277	"Greenville"	Greenville Milk Condensing Co., Greenville, Ill.	Terre Haute	7.80	4.17	29.94	1.31	1.87	
1763	"Pet"	Helvetia Milk Condensing Co., Highland, Ill.	Indianapolis	9.00	4.66	32.07	1.35	1.93	
3678	"Columbia"	Borden's Condensed Milk, N. Y. City.	Irvington	7.80	3.22	31.97	1.70	2.42	
3783	"Highland"	Helvetia Milk Condensing Co., Highland, Ill.	Indianapolis	9.00	4.89	30.90	1.29	1.84	
4452	"Top Notch"	Van Camp Packing Co., Effingham, Ill.	Berne	7.50	3.62	28.35	1.45	2.07	

#### SWEETENED CONDENSED MILK—PURE.

4454	"Shield"	Michigan Condensed Milk Co., New York	7.80	3.22	74.52	1.69	2.42		
4455	"Star"	Michigan Condensed Milk Co., New York	8.40	3.65	78.40	1.60	2.30		

#### SWEETENED CONDENSED MILK—ILLEGAL.

4453	"Leader"	Michigan Condensed Milk Co., New York	5.60	2.71	76.10	1.70	2.43	Made from milk deficient in fat	
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#### CREAM OF TARTAR.

Twenty-one samples of cream of tartar, representing the stock carried by grocery stores, were analyzed and five samples proved to be adulterated with sulphate of alumina. One sample sold under a guarantee of purity contained almost no acid ingredient and was absolutely worthless.

#### CREAM OF TARTAR—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Potass. Bi-tartrate Per Cent.
32	"Dove"	The Frank Tea & Spice Co., Cincinnati, O.	Columbus	97
102	"Pure"	Woolson Spice Co., Toledo, O.	Alexandria	98
416	"Dove"	The Frank Tea & Spice Co., Cincinnati, O.	Vincennes	97
478	Monarch	Reed, Murdoch & Co., Chicago, Ill.	Washington	98
1263	C. P.	Meyer Bros. Drug Co., St. Louis, Mo.	Mt. Vernon	98
1280	Grocers' Pure	Sprague, Warner & Co., Chicago, Ill.	Evaneville	99
1481	Meyer Bros. Pure Spice	Meyer Bros. Coffee & Spice Co., St. Louis, Mo.	Boonville	99
1636	Eddy's	Eddy & Eddy, St. Louis, Mo.	Salem	97
1693	"Ullmann's"	Ullman, Dreifus Co., Cincinnati, O.	Kokomo	98
3067		A. H. Perfect & Co., Ft. Wayne	Ft. Wayne	97
3112		Thompson & Taylor, Chicago	South Bend	98
3160		McNeill, Higgins Co., Chicago, Ill.	Michigan City	98
3174		Walsh, Boyla & Co., Chicago, Ill.	Michigan City	98
3741		Pattis D. G. Co., Indianapolis, Ind.	Indianapolis	97
4185		Schaufl & Co., Indianapolis, Ind.	Indianapolis	100

#### CREAM OF TARTAR—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Potass. Bi-tartrate Per Cent.	Remarks.
1226	"Pure"	Bruning, Evansville, Ind.	Mt. Vernon	91	Aluminum Sulphate.
1502		Louis Seitz Inc. Co.	Boonville	103	Aluminum Sulphate.
1568	"Golden Rod"	Ullmann, Dreifus & Co.	Cincinnati, O.	00	Entirely Artificial.
2991		Jeffersonville	Kokomo	72	Calcium Sulphate.
3457		Hicklin Spice Co.	Columbus	94	Aluminum Sulphate.

#### HONEY.

But 5 of the 30 samples of honey analyzed were illegal, and of those classed as adulterated two were marked "compound" but did not conform in composition to the formula on the package.

The use of glucose and cane sugar as an adulterant of strained honey is evidently being abandoned as the public taste is becoming educated to appreciate the pure product.

HONEY—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Polarization.		Remarks.
				Direct.	Invert.	
90		Cleveland Health Food Co., Cleveland, O.	Alexandria	-19.8	-20.0	Pure.
160	Weber's White Clover.	Weber Honey Co., Cincinnati	Brazil	-16.4	-20.4	Pure.
252	Warranted Pure Lemon's	Fred Coffman, Terre Haute	Terre Haute	-11.8	-14.9	Pure.
245	Scott's Pure Bees' Honey.	Lamson Gohl Syrup Co., Chicago	Terre Haute	-14.0	-16.1	Pure.
317	York's.	C. M. Scott Co., Indianapolis	Martinsville	-12.4	-18.2	Pure.
381		Geo. W. York, Chicago	Vincennes	-17.4	-18.9	Pure.
1303		H. A. Ross Apiary, Evansville	Evansville	-9.4	-9.1	Pure.
1343	"Heemia," Warranted Pure.	J. S. Tisserand, Evansville	Evansville	-16.0	-17.3	Pure.
1344	J. C. Cestey	J. S. Tisserand, Evansville	Evansville	-23.2	-24.6	Pure.
1348	Vickery Bro.	Vickery Bro., Evansville	Evansville	-17.4	-18.9	Pure.
1455	Pure White Clover.	John Sunderman, Huntington	Huntington	-12.6	-17.8	Pure.
1558		Fred W. Muth Co., Cincinnati	Jeffersonville	-17.0	-19.3	Pure.
1563		Overbacher Glucose Co., Louisville	Jeffersonville	-19.4	-19.8	Pure.
1710		C. A. Weber & Co., Cincinnati	Jeffersonville	-15.6	-16.2	Pure.
1737	Pure Extracted White Clover.	C. B. Tyrell, Davison, Mich.	Kokomo	-10.6	-17.6	Pure.
3152		Walter S. Pouder, Indianapolis	Indianapolis	-18.6	-21.5	Pure.
3165	None Such.	Durand & Kasper, Chicago	Michigan City	5.8	-6.3	Pure.
3240	Scott's Pure Bees.	McNeil-Higgins, Chicago	Michigan City	-18.4	-23.5	Pure.
3661		C. M. Scott & Co., Indianapolis	Indianapolis	-13.6	-21.3	Pure.
		Court House Grocery Co., Indianapolis	Indianapolis	-11.4	-20.4	Pure.
3662	Scott's Pure.	C. M. Scott & Co., Indianapolis	Irvington	-13.4	-16.5	Pure.
3967	California Sage		Indianapolis	-13.8	-19.5	Pure.
3968	"Basswood," Wisconsin.		Indianapolis	-9.8	-19.8	Pure.
3969	"Buckwheat," Michigan		Indianapolis	-16.2	-19.5	Pure.

HONEY—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Polarization.		Remarks.	
				Direct.	Invert.		
182	Kloer's.	Ligget Apiary, Terre Haute	Terre Haute	+ 7.6	-21.3	22.0	Adulterated. Not a pure honey.
183	Royal Blue.	W. J. Quan, Chicago	Terre Haute	+ 1.4	- 4	.61	Adulterated. Not a pure honey.
1269		Champion Syrup Refining Co., Indianapolis	Mt. Vernon	+120.0	+111.7	4.8 65.9	Does not conform to formula. Adulterated.
3466		Champion Syrup Refining Co., Indianapolis	Columbus	+149.4	+115.5	25.8 71.7	Does not conform to formula. Adulterated.
3966		Hoosier Packing Co., Indianapolis	Indianapolis	+ 82.6	+ 79.6	2.2 40.2	Adulterated.

MEAT PRODUCTS.

STEAKS, SAUSAGES, PRESSED MEATS, ETC.

The subject of prepared meats is one which has received much attention of late and in view of our investigations will bear still further consideration.

Of twenty-one samples of Hamburger steak, which is prepared by mincing scraps of beef, eighteen contained sulfites, which, calculated as sodium sulfite, the salt usually used, ranged in amount from .015 per cent. to .501 per cent.

The sulfites are used for two reasons; they are preservatives and they act as colorants, by preserving the red color of the blood corpuscles and by forming oxyhaemoglobin which is of a bright red color. They are the most dangerous of all the preservatives used in food products, not only because of their physiological action on the individual, but because they possess the property of masking the odor and appearance of decay so that putrefaction, usually intelligible to the senses, is not noticed until the meat is in an advanced stage of decomposition. Sulfurous acid, or sulfites, produce a marked toxic effect on the individual, even in doses as small as are employed in preparing meats, and even when their inhibition is not attended by apparent ill effect, it is probable that they may produce kidney lesions of a serious character. Their use is absolutely prohibited by the German government and it is hoped that similar action may be taken in this country.

The claim by the users of these preservatives that it is impossible to do without them and that their abandonment would injure business is a specious argument and endangers the public health. The use of proper precaution in handling meats, coupled with a realization that meat so aged that its odor and evidences of decay must be masked to appear presentable is not fit food for human consumption, will make it possible for the public to obtain wholesome provisions.

Of the thirteen samples of bulk sausage nine contained sulfites, and of the entire number of meat samples ten out of sixty-five contained borax.

It is probable that many dealers who resort to the use of preservatives do so under the impression that they are not injurious to health. This belief is fostered by the fact that they see no ill effects following their use in their customers, a fact, however, which a physiologist and post mortem can alone determine, and the extravagant claims for healthfulness advanced by the manufacturers of these vicious products.

Preservatives, whether they be called Preservaline, Anti-sour, or by any other name, are illegal. The only preservative agents permissible in the curing of meats are salt, saltpeter, wood smoke, vinegar, sugar and spices.

**HAMBURGER STEAK—LEGAL.**

Laboratory Number.	Article.	Manufacturer.	Retailer.	Borax.	Sodium Sulphite.
4479	Hamburger	Paul Brandlein	Paul Brandlein	Absent..	Absent.
4481	Veal and Beef	W. Simon	W. Simon	Absent..	Absent.
4486	Hamburger	Elliott Dressed Beef Co.	Elliott Dressed Beef Co.	Absent..	Absent.

**HAMBURGER STEAK—ILLEGAL.**

4452	Hamburger	A. Stuckmeyer	A. Stuckmeyer	Absent..	.178 per cent. present.
4456	Hamburger	F. Filz	F. Filz	Absent..	.147 per cent. present.
4458	Hamburger	F. W. Hebbie	F. W. Hebbie	Absent..	.164 per cent. present.
4463	Hamburger	Wm. Grund	Wm. Grund	Absent..	.429 per cent. present.
4467	Hamburger	Sam Davis	Sam Davis	Absent..	.226 per cent. present.
4472	Hamburger	Steinmetz Bros.	Steinmetz Bros.	Absent..	.492 per cent. present.
4475	Hamburger	Harry Matzko	Harry Matzko	Absent..	.260 per cent. present.
4477	Hamburger	Theo. Dietz	Theo. Dietz	Absent..	.101 per cent. present.
4500	Hamburger	Chas. Mock	Chas. Mock	Absent..	.131 per cent. present.
4502	Hamburger	Joe Cook	Joe Cook	Absent..	.288 per cent. present.
4485	Hamburger	W. H. Heckman	W. H. Heckman	Absent..	.501 per cent. present.
4487	Hamburger	Fred Wuster	Fred Wuster	Absent..	.026 per cent. present.
4488	Hamburger	Geo. Woessner	Geo. Woessner	Absent..	.170 per cent. present.
4491	Hamburger	Thos. Castor	Thos. Castor	Absent..	.144 per cent. present.
4493	Hamburger	A. L. Heckman	A. L. Heckman	Absent..	.014 per cent. present.
4500	Hamburger	E. F. Overman	E. F. Overman	Absent..	.080 per cent. present.
4501	Hamburger	Henry Coleman	Henry Coleman	Absent..	.310 per cent. present.
4502	Hamburger	J. G. Schisla	J. G. Schisla	Present..	.015 per cent. present.

**SAUSAGES—LEGAL.**

4462	Weinerwurst	Kingsans	Earl Blackman	Absent..	Absent.
4465	Weinerwurst	Wm. Grund	Wm. Grund	Absent..	Absent.
4498	Weinerwurst	Sindlinger	Chas. Cherdron	Absent..	Absent.
4503	Weinerwurst	Meier & Meuser	L. Nazeleison	Absent..	Absent.
4446	Smoked Sausage	D. T. Buser	D. T. Buser	Absent..	Absent.
4492	Bulk Sausage	Louis Schwab	Louis Schwab	Absent..	Absent.
4494	Smoked Sausage	People's Prov. Co.	People's Prov. Co.	Absent..	Absent.

**SAUSAGES—ILLEGAL.**

4466	Bulk Sausage	Sam Davis	Sam Davis	Present..	Absent.
4469	Bulk Sausage	J. Deschler	J. Deschler	Absent..	.121 per cent. present.
4471	Bulk Sausage	Hilgamer & Bro.	Hilgamer & Bro.	Absent..	.106 per cent. present.
4473	Bulk Sausage	Steinmetz Bros.	Steinmetz Bros.	Absent..	.295 per cent. present.
4474	Pork Sausage	Harry Matzko	Harry Matzko	Absent..	.090 per cent. present.
4484	Bulk Sausage	H. W. Heckman	H. W. Heckman	Absent..	.160 per cent. present.
4489	Bulk Sausage	Geo. Woessner	Geo. Woessner	Absent..	.258 per cent. present.
4490	Bulk Sausage	Chas. Wechsler	Chas. Wechsler	Absent..	.188 per cent. present.
4495	Bulk Sausage	Meier & Meuser	Meier & Meuser	Absent..	.063 per cent. present.
4504	Link Sausage	Pack. Co.	Pack. Co.	Meier & Meuser	.045 per cent. present.

**MISCELLANEOUS MEATS—LEGAL.**

Laboratory Number.	Article.	Manufacturer.	Retailers.	Borax	Sodium Sulphite
4459	Dried Beef	N. E. Specialty Co., Cleveland, O	F. W. Hebbie	Absent..	Absent
4468	Dried Beef	Nelson Morris & Co., Chicago	Sam Davis	Absent..	Absent
4461	Ham Loaf	Armours, Chicago	Barl Blackman	Absent..	Absent
4497	Ham Loaf	Armours, Chicago	Chas. H. Car	Absent..	Absent
4464	Pigs Foot Jelly	Wm. Grund, Ind.'n'ta	Wm. Grund	Absent..	Absent
4478	Fresh Tripe	Indianapolis Abattoir	Theo Dietz	Absent..	Absent

**MISCELLANEOUS MEATS—ILLEGAL.**

4457	Bologna	F. Filz	F. Filz	Absent..	.147 per cent. present.
4460	Weinerwurst	Albert Worm	F. W. Hebbie	Present..	Absent
4470	Weinerwurst	Sindlinger Co.	Sindlinger Co.	Absent..	.025 per cent. present.
4476	Veal Loaf	Harry Matzko	Harry Matzko	Absent..	.153 per cent. present.
4481	Veal Loaf	Joe Cook	Joe Cook	Absent..	.278 per cent. present.
4496	Frankfurter	Meier-Meuser Pack. Co.	Meier-Meuser Co.	Absent..	.050 per cent. present.

**MISCELLANEOUS MEAT PRODUCTS—LEGAL.**

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Remarks.
1824	Fresh Lobster "Crown"	L. Pickert Fish Co.	New Albany	
3567	Ham Loaf	Libby, McNeil & Libby, Chicago	Indianapolis	
3570	Salmon, "Sea Rose"	Thlinket Packing Co., Portland, Oregon	Indianapolis	
3576	Hamburger Stenk	Libby's, Chicago	Indianapolis	
3578	Boned Chicken "Columbia"	Mullen-Blackledge Co.	Indianapolis	
3632	Potted Chicken "Jeddo"	Court House Grocery Co.	Indianapolis	
3645	Deviled Tongue "Lion"	Fairbank Canning Co.	Indianapolis	
1528	Selected Shrimp	Thos. B. Levy Co., Cincinnati	Jeffersonville	
1713	Gold Label Shrimp	Edw. T. Russell & Co., Boston	Kokomo	

**MISCELLANEOUS MEAT PRODUCTS—ILLEGAL.**

1891	Vienna Sausage "Red Star"	Cleco Canning Co., Chicago	Salem	Preserved with Borax.
3566	Deviled Ham	Underwood Co., Boston	Indianapolis	Preserved with Borax.
3577	Potted Turkey "Columbia"	Mullan-Blackledge Co.	Indianapolis	Preserved with Borax.
3579	Dried Beef "Wedding Ring"	Bloomington, Illinois	Indianapolis	Preserved with Borax.

MISCELLANEOUS MEAT PRODUCTS—ILLEGAL—Continued.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Remarks.
3582	Chicken Tamale...	Libby, McNeil & Libby Co., Chicago	Indianapolis...	Preserved with Borax.
3771	Codfish, Shredded...	J. N. Bearsley Sons, New York City	Indianapolis...	Preserved with Borax.
3777	Frankfurters Bratwurst.....	Gabriel Triat Co., Frankfort-on-Main	Indianapolis...	Preserved with Borax.

MILK.

Most of the milk samples have been sent to the laboratory by health officers for the purpose of determining the purity of the milk supply of their cities. While the analysis made does not determine the bacterial composition of the milk, its freedom from the dirt of the stable, nor the condition of the cows producing it, yet we can satisfy the consumer that his milk is neither watered, skimmed nor preserved.

Of the 91 samples of milk analyzed, 65 were pure and 26 or 28.5% adulterated. Most of the adulterated samples were so classed because they fell below the standard of 3.25% fat, for in no case was there evidence of illegal watering.

MILK—LEGAL.

Laboratory Number.	Producer.	Where Collected.	Solids.	Fat.
3970	H. J. Myer, Terre Haute, Ind.	Napolsen, Ind.	18.96	4.6
3973	J. T. Polk, Indianapolis.	Terre Haute.	3.8	
3977	Dr. M. Mattox, Indianapolis.	Indianapolis.	4.4	
3979	Mrs. Ferguson, Indianapolis.	Indianapolis.	3.9	
4019	Chas. McCullough.	Irvington.	4.0	
4080	John Weaver.	New Albany.	4.4	
4081	S. J. Bowman.	New Albany.	3.4	
4084	W. J. Bestor.	South Bend.	4.4	
4085	J. B. Shelly.	South Bend.	3.6	
4086	E. J. Gollatz.	South Bend.	3.8	
4088	Gigo Beaver.	South Bend.	3.8	
4089	Ben Stuckey.	South Bend.	3.6	
4090	Layton Milk Co.	South Bend.	5.0	
4091	O. J. Wittner.	South Bend.	3.6	
4092	D. D. Shirk.	South Bend.	4.4	
4093	W. D. Stover.	South Bend.	4.2	
4106	Mr. Ingle.	Broad Ripple.	8.3	
4141	.	Columbus.	8.6	
4145	.	Greencastle.	5.0	
4146	.	Greencastle.	4.1	
4147	.	Greencastle.	4.8	
4155	.	Indianapolis.	25.66	20.0
4161	Polk & Co., Indianapolis.	Indianapolis.	5.0	
4192	C. L. Seifert, South Bend.	South Bend.	4.0	

MILK—LEGAL—Continued.

Laboratory Number.	Producer.	Where Collected.	Solids.	Fat.
4200	J. T. Venues, South Bend.	South Bend.	3.8	
4302	Harvey Sosman, South Bend.	South Bend.	4.0	
4305	M. B. Sherman, South Bend.	South Bend.	4.4	
4307	L. P. Smith, South Bend.	South Bend.	3.8	
4309	M. W. Hicks, South Bend, Ind.	South Bend.	4.4	
4311	Wm. Downey, South Bend, Ind.	South Bend.	3.4	
4364	.	Lebanon.	5.1	
4376	.	Lebanon.	3.6	
4378	L. J. Wirth, Princeton, Ind.	Princeton.	4.1	
4379	R. H. Davis, Lebanon, Ind.	Lebanon.	5.2	
4399	Stoops, Lebanon, Ind.	Lebanon.	4.1	
4401	Stoops, Lebanon, Ind.	Lebanon.	4.1	
4410	J. U. Luther, South Bend, Ind.	Indianapolis.	10.5	
4412	Bert A. Ray, South Bend, Ind.	South Bend.	5.3	
4413	A. J. Wittner, South Bend, Ind.	South Bend.	3.8	
4414	Edw. Mitchell, South Bend, Ind.	South Bend.	3.8	
4416	Harry Ullery, South Bend, Ind.	South Bend.	4.0	
4417	H. L. Larser, South Bend, Ind.	South Bend.	4.6	
4419	A. Sellers, South Bend, Ind.	South Bend.	4.4	
4420	E. Wulfert, South Bend, Ind.	South Bend.	3.8	
4421	E. M. Vollmer, South Bend, Ind.	South Bend.	3.4	
4507	Chas Hastings.	South Bend.	3.0	
4508	Philip Schaefer.	South Bend.	4.0	
4509	Peter Schaefer.	South Bend.	4.0	
4510	B. A. Birdsell.	South Bend.	4.1	
4511	B. A. Birdsell.	South Bend.	4.0	
4512	Jesse M. Rough.	South Bend.	3.6	
4513	David Hawblitzel.	South Bend.	3.6	
4514	Wm. Korn.	South Bend.	4.0	
4515	L. F. Coffman.	South Bend.	4.0	
4516	Jesse Kiser.	South Bend.	3.6	
4517	Aaron Wagner.	South Bend.	3.9	
4519	Frank Clemens.	South Bend.	3.85	
4520	C. B. Clemens.	South Bend.	3.9	

MILK—ILLEGAL.

Laboratory Number.	Producer.	Where Collected.	Solids.	Fat.
3963	L. M. Maltex, Indianapolis.	Indianapolis.	13.38	3.0
3976	J. T. Polk, Indianapolis.	Indianapolis.	10.81	2.6
3978	Polk Sanitary Milk Co., Indianapolis.	Indianapolis.	11.71	2.8
4015	Polk Sanitary Milk Co., Indianapolis.	Indianapolis.	3.0	
4016	Polk Sanitary Milk Co., Indianapolis.	Indianapolis.	3.0	
4018	Polk Sanitary Milk Co., Indianapolis.	Bridgeport.	2.4	
4045	John Tipton.	New Albany.	2.8	
4079	.	Fowler.	10.4	2.0
4116	.	Petersburg.	2.0	
4191	.	Indianapolis.	10.70	1.9
4297	Harry Robbins, South Bend.	South Bend.	3.2	
4298	W. H. Meiser, South Bend.	South Bend.	3.2	
4301	Layton Milk Co., South Bend.	South Bend.	3.2	
4303	E. R. Hartman, South Bend.	South Bend.	9.0	
4304	Mrs. M. Kline, South Bend.	South Bend.	3.2	
4306	Bert Ray, South Bend.	South Bend.	10.6	2.8
4308	A. P. Johnson, South Bend.	South Bend.	3.2	
4310	W. J. Brown, South Bend.	South Bend.	11.0	2.6
4350	.	Lebanon.	3.2	
4415	Layton Milk Co., South Bend.	South Bend.	3.0	
4518	Thos. Jackson.	South Bend.	11.91	3.1
4521	S. J. Bowman.	South Bend.	12.45	3.15

## ICE CREAM.

## BANANA EXTRACT—ILLEGAL.

Laboratory Number.	Manufacturer.	Where Collected.	Fat, Per Cent.	Gelatin.	Starch.	Remarks.
4422	Wm. Downey .....	South Bend ..	8.5	None ..	None ..	Low in fat.
4423	Chas. Crome .....	South Bend ..	12.0	None ..	None ..	Pure.
4424	N. Y. Candy Store .....	South Bend ..	11.5	Trace ..	Trace ..	Pure.
4425	John Noble .....	South Bend ..	11.5	Much ..	None ..	Not a pure cream.
4426	Wittner & Hobick .....	South Bend ..	10.0	Much ..	None ..	Not a pure cream.
4427	Mrs. J. L. Turner .....	South Bend ..	7.0	Much ..	None ..	Not a pure cream.

## MISCELLANEOUS FLAVORING EXTRACTS.

Under this head we have classed a variety of products occasionally used for flavoring cakes, confections and dessert preparations.

But four out of twenty-four samples examined were legal. In most cases the goods were misbranded or improperly labeled, most of the pineapple, banana, strawberry, raspberry, peach extracts, etc., being sold as pure fruit extracts.

As a matter of fact it is impossible to make these flavors from the fruits, and they must be made from solution in alcohol of synthetic organic preparations known as compound ethers. Some of the compound ethers possess a remarkable resemblance to particular fruits. Butyric ether has a distinct pineapple flavor, and a mixture of amyl acetate and butyric ether counterfeits very closely the flavor of the banana.

If these extracts are marked "Artificial Fruit Flavors" they can be legally sold.

## RASPBERRY—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Place Where Collected.	Specific Gravity.	Alcohol, per cent. by Vol.	Color.	Remarks.
4522	Hopper's .....	E. H. Hopper & Co., Findlay, O. ....		.9230	55.60	Methylviolet.	Properly labeled.

## RASPBERRY—ILLEGAL.

1454	Double .....	E. W. Gillett, Chicago	Huntington ..	.9747	21.49	Veg. color ..	Not properly labeled.
3614	.....	Van Duzer & Co.	Indianapolis ..	.9365	49.02	Veg. color ..	Not properly labeled.

Laboratory Number.	Brand.	Manufacturer.	Place Where Collected.	Specific Gravity.	Alcohol, per cent. by Vol.	Color.	Remarks.
63	Standard .....	Jacques Atwood Co., Chicago and St. Louis .....	Elwood .....	.9542	38.60	Naphthal yellow .....	Not properly labeled.
3722	.....	Geiger-Tinney Co., Indianapolis ..	Irvington ..	.9075	62.55	Tropaeolin ..	Not properly labeled.

## STRAWBERRY—LEGAL.

1412	Hopper's .....	Hopper & Co., Findlay, O.	Huntington ..	.9100	60.00	Aniline dye ..	Properly labeled.
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## STRAWBERRY—ILLEGAL.

3720	.....	Geiger-Tinney Co., Indianapolis ..	Irvington ..	.9075	62.55	Aniline dye ..	Not properly labeled.
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## PINEAPPLE—LEGAL.

1410	Cooks and Bakers .....	Souders & Co., Dayton, O. ....		.9380	48.20	Dinitro cresol ..	Properly labeled.
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## PINEAPPLE—ILLEGAL.

285	.....	Geiger-Tinney Co., Indianapolis ..	Martinsville ..	.9968	67.60	Tropaeolin ..	Not properly labeled.
20	Old Home .....	J. C. Grant Chemical Co., Chicago	Columbus ..	.9610	30.40	Naphthal yellow .....	Not properly labeled.
1409	Mader's .....	Wabash Bak. Powder Co., Wabash, Ind .....	Huntington ..	.9511	40.41	Colorless .....	Not properly labeled.
1439	Standard .....	Jacques Atwood & Co., Chicago .....	Huntington ..	.9345	42.52	Naphthal yellow .....	Not properly labeled.
3723	.....	Geiger-Tinney Co., Indianapolis ..	Irvington ..	.9144	59.50	Tropaeolin ..	Not properly labeled.

## MISCELLANEOUS EXTRACTS—ILLEGAL.

88	Nectar Ext., "Hopper" ..	G. H. Hopper & Co., Findlay, O.	Alexandria ..	.9485	42.12	.....	Not properly labeled.
1411	Rose Ext. .....	E. W. Gillett, Chicago	Huntington ..	.8786	74.48	.....	Not properly labeled.

MISCELLANEOUS EXTRACTS—ILLEGAL—Continued.

MOLASSES—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Place Where Collected.	Specific Gravity.	Alcohol per cent by Vol.	Color.	Remarks.
1428	Peach Ext., "Club House"	Franklin MacVeagh & Co., Chicago.....	Huntington ..	.88.03	73.81	.....	Not properly labeled.
6303	Almond.....	Pettis Dry Goods Co. ....	Indianapolis. ....	.9107	61.10	.....	Not properly labeled.
3604	Nutmeg .....	Pettis Dry Goods Co. ....	Indianapolis. ....	.8901	69.88	.....	Not properly labeled.
3607	Ginger.....	Pettis Dry Goods Co. ....	Indianapolis. ....	.9205	56.77	.....	Not properly labeled.

ORANGE EXTRACT—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer.	Place Where Collected.	Specific Gravity.	Alcohol per cent by Vol.	Color.	Polarization.	Orange Oil. per cent.
56	Standard.....	Jacques Atwood & Co., Chicago and St. Louis	Anderson....	.9457	43.76	Naphthol yellow.....	+ .2	.075
87	"Hopper" ...	C. H. Hopper & Co., Findlay, O.	Alexandria...	.8548	68.09	Natural .....	+ .8	.80
1437	"Standard" .....	Jacques Atwood & Co., Chicago	Huntington ..	.9139	41.80	Naphthol yellow.....	+ .1	.037
3602	.....	Pettis Dry Goods Co. ....	Indianapolis. ....	.8472	85.88	Natural .....	+ 9.4	3.55

ORANGE EXTRACT—LEGAL.

4386	.....	Zipp & Co., Cleveland, O.	Michigan City	.....	.....	.....	+30.1	6.17
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MOLASSES AND SORGHUM.

Of the 87 samples of molasses and sorghum analyzed, 17 or 46% contained glucose. Many molasses, especially since improved methods of preparing cane sugar have come into use, have so slight a sugar content and such a dark color and strong taste that they are unsalable. The custom of blending with glucose syrups has greatly improved the quality of these low grades, and when molasses so prepared is sold properly labeled, there can be no objection to its use. But under the law all goods so prepared must be plainly marked "Compound."

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Direct Polarization.	Invert Polarization.	Sucrose.	Remarks.
122	Fancy Open Kettle.....	New Orleans Coffee Co., New Orleans	Muncie.....	+40.0	-18.4	43.0	Pure.
268	New Orleans—Dark.....	Natetrez Molasses Co., New Orleans	Terre Haute.....	.....	.....	.....	Burnt—low grade.
1188	.....	American Grocery Co., Louisville	Princeton....	+38.8	-9.4	37.2	Pure.
1246	G. R. N. O. M.	Walsh, Boyle & Co. ....	Mt. Vernon....	+28.4	-13.0	20.7	Pure.
1271	Open Kettle.....	.....	Mt. Vernon....	+29.2	-13.6	31.1	Pure.
1273	Lecti.....	Botts-Young Molasses Co., New Orleans	Mt. Vernon....	+46.4	-5.9	40.8	Pure.
1304	.....	Walsh-Boyle Co., Chicago	Evansville....	+34.8	-10.7	38.7	Pure.
1670	.....	New Orleans Coffee Co., New Orleans	Salem .....	+47.2	-18.7	49.5	Pure.
3706	.....	.....	Irvington....	+41.0	-11.2	39.2	Pure.
3233	Plantation Compound.....	Champion Syrup Refining Co., Indianapolis	West Indianapoli....	+68.4	+17.1	37.0	Formula 75% N. O.; 25% glucose; labeled correctly.

MOLASSES—ILLEGAL.

55	Quaker N. O. ....	Crescent Preserve Co., Indianapolis	Anderson ...	114.4	+40.4	55.0	Glucose 33.0%. Adulterated.
342	Fountain.....	Frombold Bros., Indianapolis	Vincennes ...	151.6	+14.5	27.9	Glucose 13.5%. Adulterated.
390	O. K. ....	Lafourche Plantation ...	Vincennes ...	179.8	155.4	18.3	Glucose 65%. Adulterated.
1651	Last Year, 1901...	Zinsmeister Bros., New Albany	New Albany	178.6	+47.0	23.7	Glucose present. Adulterated.
1657	.....	Sobeiff & Wheat, Louisville	New Albany	110.6	+80.5	15.9	Glucose 61%. Adulterated.
1694	.....	New Orleans Molasses Co., New Orleans	Salem .....	119.4	199.6	13.3	Glucose 47%. Adulterated.
1769	.....	New Orleans Coffee Co., New Orleans	Indianapolis...	+40.4	-10.0	46.0	Sulphuric acid present. Adulterated.
3460	.....	.....	Columbus....	+99.4	+73.7	19.3	Glucose 45.7%. Adulterated.
3677	Dove .....	M. H. Alexander & Co., New Orleans	Irvington....	+73.4	+43.5	22.4	Glucose 34.8%. Not true to formula.
3775	Golden Eagle....	Delta Packing Co., New Orleans	Indianapolis...	+88.6	+48.1	30.4	Glucose 33.2%. Adulterated.
8101	Quaker.....	Crescent Preserve Co., Indianapolis	Columbus....	+137.8	+128.0	7.3	Glucose 74.5%. Adulterated.

## SORGHUM MOLASSES—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Direct Polarization.	Invert Polarization.	Sucrose.	Remarks.
1138		C. W. Adams & Co., Louisville	Oakland City	+41.4	-5.7	35.4	Pure.
1209	Country	Jos. Colgate, Velpen, Ind.	Princeton	+26.6	-12.1	29.1	Pure.
1214		Jos. Colgate, Stendal Ind.	Princeton	+27.0	-12.3	22.0	Pure.
1240	Cane Juices	Walsh, Boyle & Co., Chicago	Mt. Vernon	+23.2	-13.2	27.3	Pure.
1248			Mt. Vernon	+26.6	-6.1	24.5	Pure.
1296		G. F. Smock, Cardsville, Ky.	Evansville	+19.4	-9.4	21.6	Pure.
1376	Indiana		Evansville	+35.6	-18.0	40.3	Pure.
1484		From Farmer Boniface, Weber & Allen, Jeffersonville	Boonville	+43.4	-12.8	42.3	Pure.
1572			Jeffersonville	+41.0	-7.4	36.4	Pure.
3712	Compound	Crescent Preserve Co., Indianapolis	Irvington	+117.2	+60.7	35.1	Glucose, 46.9. True to formula

## SORGHUM MOLASSES—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Direct Polarization.	Invert Polarization.	Sucrose.	Remarks.
1197		Bement & Seitz, Evansville	Princeton	+76.4	+44.4	24.0	Glucose, 68%. Adulterated.
1207	Fenasco	National Molasses Co., St. Louis	Princeton	+142.0	+135.0	0.52	Glucose, 80%. A glucose syrup.
1232	95% Pure, "Diamond Island"	Bement & Seitz, Evansville	Mt. Vernon	+73.2	+55.8	13.0	Glucose, 73%. Adulterated.
1333		Bement & Seitz, Evansville	Evansville	+39.8	+56.5	25.0	Glucose, 60%. Adulterated.
3695	Our Pride	Davenport Refining Co., Davenport, Ia.	Irvington	+121.2	+115.8	11.5	Glucose, 62.7. Not true to formula.
341	Fountain	Fromhold Bros., Indianapolis	Vincennes	+128.2	+125.4	2.1	Glucose, 72%. Adulterated.

## TABLE SYRUP—LEGAL.

137	Breakfast Syrup	Sehnell & Co., Indianapolis	Brazil	+141.6	+132.0	7.2	Glucose, 76.8. Pure.
143	Buffalo	Hulman & Co., Terre Haute	Brazil	+53.6	-12.1	49.4	Pure.
3717	Black Wing	J. C. Perry & Co., Indianapolis	Irvington	+31.0	-17.0	36.0	Pure.

## MAPLE SYRUP—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Ash.	Alkalinity of Ash in H. Cl.	Direct Polarization.	Invert Polarization.	Sucrose.
4062			Broad Ripple	.55	+56.0	-20.5	67.5	
4063			Datesville	.72	+62.2	-23.4	62.9	
4067			Carmel	.82	11.2	+64.0	-19.3	55.1
4104			Ft. Wayne	.93	+64.4			
4120		Made by Farmer	Indianapolis	.71	12.0	+56.6	-20.4	68.9
4121		Made by Farmer	Indianapolis	.52	9.6	+67.8	-20.4	70.2
4124		Made by Farmer	Indianapolis	.64	8.4	+55.0	-20.2	66.8
4129			Columbus	.56	7.2	+60.2	-21.9	61.2
4129			Columbus	.51	10.8	+64.2	-21.7	64.6
4137		Made by Farmer	Indianapolis	.74	9.8			
4157		From Country	Indianapolis	.55	6.8	+62.2	-21.1	63.1
4158		M. Owen & Son	Parkman, Ohio	.62	10.0			56.4
4187			Indianapolis	.65	6.8			
4194			Indianapolis	.62	10.0			
4195		John Elliott	Fremont, Ind.	.73	9.2			
4204		J. Todd, Bedford, Ind.	Ft. Wayne	.60	10.4			
			Indianapolis	.67	10.8	+50.3	-19.8	63.0

## MAPLE SUGAR—LEGAL.

4134			Rockford	11.4	16.0			
4159			Sanborn	.96	5.2			
4140			Sanborn	.98	9.0			

## MAPLE SYRUP—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Ash.	Alkalinity of Ash in H. Cl.	Direct Polarization.	Invert Polarization.	Sucrose.	Remarks.
64	Belmont	Chicago Concentrating Co., Chicago	Elwood	.2	4	+47.6	-22.0	51.1	Cane sugar syrup. Adulterated.
79	Old Manso	Wm. R. Manierre, Chicago	Alexandria	.32	1.6	+82.2	-23.1	40.7	Cane sugar syrup. Adulterated.
385	Mapline	New Orleans Coffee Co.	Vincennes		199.4	+77.6	16.6		No maple present. Glucose 73.7%. Not true to label. Adulterated.
4086			Indianapolis	.49	6.4	+61.6	-21.5	62.4	Small amount cane sugar. Adulterated.
4123	Ohio Maple Syrup		South Bend	.43	6.8	+65.0	-20.4	84.4	Contains cane sugar. Adulterated.
4127			Columbus	.16	2.0	+60.6	-21.3	61.5	Caramel color. Almost wholly cane sugar syrup. Adulterated.

# SPICES.

We have continued the work on spices and are glad to note that the samples last analyzed have shown a small percentage of adulteration in comparison with results heretofore published.

Of the 44 samples of allspices analyzed 38 were pure and 6 adulterated; of the 43 samples of ginger 41 were pure and but 2 adulterated, and of 28 samples of miscellaneous spices, 17 were pure and 11 adulterated.

## GINGER—LEGAL.

Laboratory Number.	Retailer.	Where Collected.
917	D. & H. Rosebaum	Mt. Vernon.
788	Housworth Bros.	Elkhart.
1976	Meyers Drug Store	South Bend.
2012	O. C. Boston	South Bend.
2170	Summers Pharmacy	Hammond.
2201	W. C. Letherman	Valparaiso.
2252	G. W. Hoffmann	Logansport.
2340	Rogan Bros.	Lafayette.
2351	J. D. Bartlett	Lafayette.
2456	Cassell Bros.	Anderson.
2469	Buck & Brickle	Anderson.
2547	Physicians Drug Store	Muncie.
2563	W. H. Birsley	Alexandria.
2580	City Drug Store	Alexandria.
2591	E. D. Robinson	Alexandria.
2637	J. H. Green	Elwood.
2747	F. H. Gerhart	Kokomo.
2798	S. Rosenthal	Tipton.
2810	L. T. Harker	Tipton.
2965	E. H. Wilson	Indianapolis.
3507	C. L. Mitchell	Noblesville.
992	Blue Drug Store	Peru.
1128	J. O. Hutzel	Pt. Wayne.
1640	H. M. Phillips	Auburn.
1896	F. J. Goldman	Elkhart.
1910	Leonard & Bentz	Elkhart.
1939	O. J. Beeson	Goshen.
1993	A. Coonley & Co.	South Bend.
2023	R. P. Milton	South Bend.
2054	J. M. Callender	Laporte.
2142	J. W. Weis	Hammond.
2185	Corner Drug Store	Valparaiso.
2366	Wells-Yeager-Best Co.	Lafayette.
2534	Shaw & Jackson	Muncie.
2676	Jay Bros.	Kokomo.
2821	H. Mehlig	Tipton.
2980	Navin's Pharmacy No. 1	Indianapolis.
3494	Frank E. Rose	Noblesville.
3511	A. N. Troutt	Noblesville.
3809	B. Doolittle	Jeffersonville.
3932	Doherty's Drug Store	Jeffersonville.

## GINGER—ILLEGAL.

2854	W. M. Birk	Indianapolis.	Adulterated with ground olive stones.
3893	Chas D. Knoefel	New Albany.	

## ALLSPICE—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.
389	Standard	Frank Tea & Spice Co., Cincinnati, O.	Vincennes.
477		Reed, Murdock & Co., Chicago, Ill.	Washington.
1067		Butterbaugh & Co., Wabash, Ind.	Wabash.
1197	Pure	H. G. Sommers, Ft. Wayne, Ind.	Ft. Wayne.
1250	Pure	Frank Tea & Spice Co., Cincinnati, O.	Mt. Vernon.
1257	Dove	Sherman Bros. & Co., Chicago, Ill.	Mt. Vernon.
1276	Pure	Thompson & Taylor, Chicago, Ill.	Mt. Vernon.
1361	Pure	A. H. Perfett & Co.	Evanaville.
1389	Perfect	Meyer Bros. Pure Spice	Huntington.
1480		Lewis Seitz Gro. Co., St. Louis, Mo.	Boonville.
1485		Lewis Seitz Gro. Co., Evansville, Ind.	Boonville.
1500		R. J. Thornton, Louisville, Ky.	Boonville.
1531	Pure	R. J. Thornton, Louisville, Ky.	Jeffersonville.
1541	Pure	Woodson Spices Co., Toledo, O.	Jeffersonville.
1585	Golden Rod	Ullmann, Dreifus & Co., Cincinnati, O.	Jeffersonville.
1586	Pure	R. J. Thornton & Co., Louisville, Ky.	New Albany.
1638		Dwinell-Wright Co., Boston, Mass.	Kokomo.
1703	Pimentito Royal	F. W. Meissner, Laporte, Ind.	Laporte.
2045		Wells-Yeager-Best Co., Lafayette, Ind.	Lafayette.
2357		Thompson & Taylor Co., Chicago, Ill.	Kokomo.
2986		F. Widler & Co., Cleveland, O.	Kokomo.
2992		F. Widler & Co., Cleveland, O.	Kokomo.
2994		Grocers' Supply Co., Indianapolis, Ind.	Kokomo.
3004	Triumph	F. P. Wilt & Co., Ft. Wayne, Ind.	Ft. Wayne.
3058		Thompson & Taylor Co., Chicago, Ill.	So. Bend.
3114		Durand & Kasper, Chicago, Ill.	Michigan City.
3147		Thompson & Taylor Co., Chicago, Ill.	Michigan City.
3159		Court House Gro. Co., Indianapolis, Ind.	Indianapolis.
3301		C. C. Scheidt, Columbus, Ind.	Indianapolis.
3224		E. J. Gillies & Co., New York.	Columbus.
3369		Hiekin Spice Co., Cincinnati, O.	Columbus.
3412		Nixon & Co., Chicago, Ill.	Columbus.
3430		Schnull & Co., Indianapolis, Ind.	Columbus.
3442	Quaker	Keefe, Wells & Bauer, Indianapolis, Ind.	Columbus.
3445		Pattie D. G. Co., Indianapolis, Ind.	Indianapolis.
3743		J. B. Bright & Son, Indianapolis, Ind.	Indianapolis.
3750		Schnull & Co., Indianapolis, Ind.	Bloomington.
3832	Finest Quality	H. J. Fooley, Columbus, Ind.	

## ALLSPICE—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.
1236	Pure	F. C. Dietz, Mt. Vernon, Ind.	Mt. Vernon.
1332		Sherman Bros. & Co., Chicago, Ill.	Evansville.
1522		Hulman & Co., Terre Haute, Ind.	Huntingburg.
2171		H. S. Quick, Columbus, Ind.	Hammond.
3317		H. J. Fooley, Columbus, Ind.	Columbus.
3472			Columbus.

## MISCELLANEOUS SPICES—LEGAL.

2838	Powd. Ginger Jama	Francis Pharmacy,	Indianapolis.
4352	Triumph Ginger	Sent in by Grocers' Supply Co.	Indianapolis.
4184	White Pepper	Sent in by Schnull & Co.	3.80%
4165	Cinnamon	Sent in by Schnull & Co.	3.28%
4167	Ginger	Sent in by Schnull & Co.	6.75%
4168	Allspice	Sent in by Schnull & Co.	4.46%
4173	Diadem Cinnamon	Sent in by Schnull & Co.	3.94%
4175	Diadem Ginger	Sent in by Schnull & Co.	4.43%
4177	Diadem Allspice	Sent in by Schnull & Co.	3.50%
4178	Diadem Sage	Sent in by Schnull & Co.	4.87%
4180	Quaker Cinnamon	Sent in by Schnull & Co.	3.17%
4181	Quaker Ginger	Sent in by Schnull & Co.	7.00%
4183	Quaker Allspice	Sent in by Schnull & Co.	4.85%
4184	Quaker Mace	Sent in by Schnull & Co.	2.41%

## CIDER VINEGAR.

All of the 35 samples of cider vinegar analyzed were sent to the laboratory for analysis by wholesalers and retailers who wished to know the quality of the goods they were selling. Most of these samples were evidently the product of one house, and if the quality of their goods, rather than their guarantee, is to be accepted as evidence, they are deliberately foisting upon their customers an artificial, colored grain vinegar as a pure cider vinegar product.

Under the present interstate commerce law it is impossible for us to reach the firm and prosecute them for persistent violation of our food laws, and we must content ourselves with making their customers pay the penalty for handling such goods. Such action savors more of persecution than prosecution, however, for we are convinced of the honest intent of many of the firms who are handling their vinegar, and realize that they are but the victims of a determined purpose to misbrand and misrepresent goods for the sake of illegitimate profits.

## CIDER VINEGAR—LEGAL.

Laboratory Number.	Brand.	Manufacturer or Retailer.	Where Collected.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.
4010	Cider Vinegar	Red Cross Vinegar Co., St. Louis.	Indianapolis.	5.09	2.34	.322	32.	1.2	.....	
41002	Pure Cider.	Kethle, Wells & Bauer, Indianapolis.	Indianapolis.	4.10	1.63	.034	12.	-0.0	Normal.	Normal.
4133	Pure Cider.	A. H. Perfect & Co., Ft. Wayne	Ft. Wayne	4.34	2.27	.27	32.	-4.0	Mod'te.	Normal.
4260	Cider.	Red Cross Vinegar Co., St. Louis.	Indianapolis.	4.14	2.45	.28	22.	-0.0	V. Sl.	Normal.
4261	Cider.	Red Cross Vinegar Co., St. Louis.	Indianapolis.	4.14	2.44	.277	24.	-6.0	V. Sl.	.....
4291	Pure Cider.	Red Cross Vinegar Co., St. Louis.	Indianapolis.	4.14	2.44	.277	24.	-6.0	V. Sl.	.....
4345	Cider Ky. Bello	Price & Lucas, Louisville.	Indianapolis.	4.16	2.59	.350	30.	-8	V. Sl.	Normal.
4368		Kethle, Wells & Bauer, Indianapolis.	Indianapolis.	4.22	6.63	.341	8.	-11.0	Normal.	Normal.
4396	Pure Cider.	Geo. Blue, Indianapolis.	Indianapolis.	4.10	2.00	.290	28.	-8	Normal.	Normal.
4400		G. E. Burley & Co., Ft. Wayne	Indianapolis.	4.24	6.04	.50	42.	-3.2	Normal.	Normal.
4430		Hainz, Pittsburgh.	Ft. Wayne	4.86	2.11	.264	28.	-8	Normal.	Normal.
			Indianapolis.	4.38	2.48	.291	24.	-3.2	Normal.	Normal.

\* An abnormal vinegar.

§ Low in solids.

## CIDER VINEGAR—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer or Wholesaler.	Where Collected.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.
4040	Pure Cider.	.....	Fort Wayne.	3.92	2.19	.228	16.	-3.4	Mod.	Caramel
4061	Cider.	.....	Kokomo.	6.20	1.25	.125	20.	.....	Light. Mod.	Caramel
4099	Sterilized Cider.	Price & Lucas, Louisville, Ky.	Indianapolis.	3.76	.368	.050	6	-2.0	Slur-bility.	Caramel
4119	Cider.	.....	Fort Wayne.	3.83	1.37	.20	16.	-0.6	Faint tur-bidity	Caramel
4152	Cider.	N. Y. Cider Co., St. Louis.	Tipton.	4.14	.342	.037	.....	1.6+	None.	Caramel
4184	Cider.	Red Cross Vinegar Co., St. Louis.	Indianapolis.	3.51	.206	.01	.....	.....	.....	Caramel
4200	Madison Co. Cider.	Red Cross Vinegar Co., St. Louis.	Richmond.	3.82	.218	.014	.....	10.0	.....	Caramel
4201	Cider.	.....	Muncie.	4.18	2.26	.020	32.	+4.	Heavy	Caramel
4209	Pure.	N. Y. Cider and Vinegar Co., St. Louis.	Thorntown.	35.4	239	.025	.....	0.0	None	Caramel
4256	Pure Apple.	Red Cross Vinegar Co., St. Louis.	Lebanon.	3.40	.243	.020	.....	18.	.....	Caramel
4259	Cider.	.....	Indianapolis.	4.36	2.39	.192	6.	+5.6	Heavy	Caramel
4282	Pure Cider.	.....	Tipton.	3.94	2.09	.188	16.	-6.	Heavy	Caramel
4289	Pure Cider.	N. Y. Cider and Vinegar Co., St. Louis.	Lafayette.	3.96	.321	.018	.....	16.	Very slight.	Caramel
4290	Cider.	.....	North Salem.	3.36	.320	.022	.....	18.	None.	Caramel
4296	Pure Cider.	.....	Indianapolis.	4.42	2.44	.105	8	14.6	Mod.	Caramel
4312	Pure Cider.	.....	Bluffton.	3.85	2.07	.275	20.0	18.	Heavy	Normal
4344	Apple.	Price & Lucas, Louisville, Ky.	Indianapolis.	4.85	.207	.032	.....	11.0	None.	Caramel
4349	Cider.	Red Cross Vinegar Co., St. Louis.	Indianapolis.	3.38	.205	.015	.....	10.0	None.	Caramel
4363	Cider.	Red Cross Vinegar Co., St. Louis.	Indianapolis.	3.50	.21	.010	.....	1.0	None.	Caramel
4365	H. Tank, No. 1.	.....	Indianapolis.	6.04	2.24	.232	19.	11.8	Normal	Normal
4367	No. 7.	.....	Indianapolis.	2.17	2.05	.370	30.	10.0	.....	Normal
4370	Cider.	Logansport.	Logansport.	3.90	.282	.026	.....	1.4	.....	Caramel
4407	Pure Cider.	Hymera.	Hymera.	4.13	.293	.034	.....	1.4	.....	Caramel
4433	Pure Cider.	.....	Union City.	3.95	.288	.027	.....	1.0	.....	Caramel

## GRAIN VINEGAR—ILLEGAL.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Remarks.
4073	Grain Vinegar.	.....	Muncie.	3.6	.....	.....	.....	.....	.....	Slightly below stand-ard.
4074	Grain Vinegar.	.....	Muncie.	3.9	.....	.....	.....	.....	.....	Slightly below stand-ard.

## GRAIN VINEGAR—ILLEGAL—Continued.

Laboratory Number.	Brand.	Manufacturer.	Where Collected.	Acidity as Acetic Acid	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Remarks.
4343	Malt . . . . .	Price & Lucas, Louisville, Ky.	Indianapolis.	2.83	.137	...	.012	+1.0	...	Not a malt vinegar.

## MISCELLANEOUS FOOD PRODUCTS.

Under this head are classed a variety of subjects hardly adapted for classification, such as obesity cures, soda fountain syrups, fruit colors, etc. Of the seventeen samples examined but one was illegal.

## MISCELLANEOUS DRUGS.

We have devoted some time to the examination of drugs in the form of the chemicals commonly carried in stock by druggists. The samples analyzed were for the most part of good quality.

Of the seven samples of potassium iodide all were pure and up to the standard. Of the nine samples of potassium chlorate five were pure and four below standard. Two of the three samples of zinc sulphate were pure. The third sample, although pure, was improperly labeled.

All the fourteen samples of boric acid examined were pure, as were the seven samples of sodium phosphate, the four samples of Rochelle salts and single samples of tartaric and salicylic acid, powdered senna, aloes, etc. All the four samples of sulphur were pure, but of the twenty samples of precipitated sulphur not a single sample was free from adulteration. All contained large quantities of calcium sulphate. Only one sample contained more than 55 per cent. of sulphur and in almost all the samples the calcium sulphate content was about equal to that of the sulphur. This condition is undoubtedly the result of careless preparation.

Precipitated sulphur is a preparation made by boiling a mixture of powdered sulphur and slaked lime, filtering the solution, and adding hydrochloric acid. The precipitate is then filtered and washed. Precipitated sulphur contains no calcium sulphate and leaves no sediment on ignition.

## BORIC ACID—LEGAL.

Laboratory Number.	Retailers.	Where Collected.	Percentage Purity.	Remarks.
815	C. Kightly . . . . .	Oakland City	100.	Pure.
826	A. Young . . . . .	Oakland City	99.9	Pure.
852	John Leaval & Son . . . . .	Evansville	100.	Pure.
1150	C. B. Woodworth & Co . . . . .	Ft. Wayne	100.	Pure.
1165	Ranke & Nussbaum . . . . .	Ft. Wayne	99.9	Pure.
1177	Droier & Bro . . . . .	Ft. Wayne	99.8	Pure.
1227	Pellens & Lewis . . . . .	Ft. Wayne	99.9	Pure.
2164	M. Kolb . . . . .	Hammond	99.9	Pure.
2407	Anderson Drug Co . . . . .	Anderson	98.7	Pure.
2784	Moore Bros . . . . .	Tipton	100.	Pure.
2891	F. H. Carter . . . . .	Indianapolis	99.2	Pure.
2921	E. W. Stucky . . . . .	Indianapolis	99.9	Pure.
2952	Weber Drug Co . . . . .	Indianapolis	100.	Pure.
2968	E. H. Wilson . . . . .	Indianapolis	100.	Pure.

## POT. CHLORATE—LEGAL.

Laboratory Number.	Retailers.	Where Collected.	Remarks.
1049	Fowler & Kerlin . . . . .	Watash	Pure.
1123	J. C. Hutzell . . . . .	Ft. Wayne	Pure.
1148	C. B. Woodworth & Co . . . . .	Ft. Wayne	Pure.
1162	Ranke & Nussbaum . . . . .	Ft. Wayne	Pure.
2251	G. W. Hoffman . . . . .	Logansport	Pure.

## POT. CHLORATE—ILLEGAL.

1101	Schaefer & Schaefer . . . . .	Huntington	Not Pure.
1913	Leonard & Bentz . . . . .	Elkhart	Not Pure.
1979	Meyers Drug Store . . . . .	So. Bend	Not Pure.
2368	Wells-Yeager-Best Co . . . . .	Lafayette	Not Pure.

## SODA PHOSPHATE—LEGAL.

770	S. F. Clapp . . . . .	Washington	Pure.
805	J. N. Jones . . . . .	Washington	Pure.
900	H. J. Schlaepfer . . . . .	Evansville	Pure.
1038	R. E. Clark . . . . .	Wabash	Pure.
1082	M. Kaylor . . . . .	Huntington	Pure.
1234	Pellens & Lewis . . . . .	Ft. Wayne	Pure.
3842	Gentry Drug Store . . . . .	Bloomington	Pure.

## ROCHELLE SALTS—LEGAL.

1226	Pellens & Lewis . . . . .	Ft. Wayne	Pure.
2083	Woodson & Willits . . . . .	Michigan City	Pure.
2197	W. C. Letherman . . . . .	Valparaiso	Pure.
2422	J. B. Wehrle . . . . .	Anderson	Pure.

## TARTARIC ACID—ILLEGAL.

Laboratory Number.	Retailer.	Where Collected.	Remarks.
2356	J. D. Bartlett .....	Lafayette .....	Sodium sulphate present. Adulterated.

## PO. SENNA.—LEGAL.

2355	J. D. Bartlett .....	Lafayette .....	Pure.
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## PO. SOCT. ALOES—ILLEGAL.

1023	.....	Wabash .....	Not pure.
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## POT. IODIDE—LEGAL.

963	Joe Haney .....	Peru .....	Pure.
974	Porter The Druggist .....	Peru .....	Pure.
994	Blue Drug Store .....	Peru .....	Pure.
1081	M. Kaylor .....	Huntington .....	Pure.
1180	M. Dreier and Bro .....	Ft. Wayne .....	Pure.
1181	Central Drug Store .....	Elkhart .....	Pure.
2657	W. Cogswell .....	Elwood .....	Pure.

## ZINC SULPHATE—LEGAL.

901	H. J. Schlaepfer .....	Evansville .....	Pure.
1033	M. Kaylor .....	Huntington .....	Pure but improperly labeled.
1225	Pellens and Lewis .....	Ft. Wayne .....	Pure.

## SALICYLIC ACID—LEGAL.

849	John Laval & Son .....	Evansville .....	Pure.
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## PRECIPITATED SULPHUR—ILLEGAL.

Laboratory Number.	Retailer.	Where Collected.	Percent of Sulphur.	Percent of Calcium Sulphate.	Remarks.
715	I. J. Biggs .....	Princeton .....	51.3	48.7	Adulterated.
780	A. F. Schmidt .....	Washington .....	51.1	45.9	Adulterated.
836	A. G. Troutman .....	Oakland City .....	51.9	48.1	Adulterated.
866	J. F. Romin .....	Evanaville .....	51.1	48.9	Adulterated.
880	Meek & Albers .....	Evansville .....	48.6	48.6	Adulterated.
973	Porter the Druggist .....	Peru .....	51.5	48.5	Adulterated.
1035	Schaefer & Schaefer .....	Huntington .....	50.9	49.1	Adulterated.
1161	Ranks & Nissbaum .....	Ft. Wayne .....	53.6	46.4	Adulterated.
1181	Dreier & Bro .....	Ft. Wayne .....	49.8	50.2	Adulterated.
1828	H. B. McCord .....	Auburn .....	49.3	57	Adulterated.
1842	H. M. Phillips .....	Auburn .....	54.0	46.0	Adulterated.
1878	Central Drug Store .....	Elkhart .....	51.0	49.0	Adulterated.
1894	F. J. Goldman .....	Elkhart .....	50.7	49.3	Adulterated.
1911	Leonard & Bentz .....	Elkhart .....	51.8	48.2	Adulterated.
1995	C. Coonley & Co .....	South Bend .....	50.8	49.2	Adulterated.

## PRECIPITATED SULPHUR—ILLEGAL—Continued.

Laboratory Number.	Retailer.	Where Collected.	Percent of Sulphur.	Percent of Calcium Sulphate.	Remarks.
2049	J. M. Collender .....	LaPorte .....	51.4	48.6	Adulterated.
2060	T. H. Boyd & Co .....	LaPorte .....	51.1	45.9	Adulterated.
2183	Corner Drug Store .....	Valparaiso .....	51.8	46.2	Adulterated.
2706	W. Scott .....	Kokomo .....	53.7	46.3	Adulterated.
4143	Francis Pharmacy .....	Indianapolis .....	52.1	47.9	Adulterated.

## SULPHUR—LEGAL.

Laboratory Number.	Retailer.	Where Collected.	Remarks.
1123	J. C. Hutzell .....	Ft. Wayne .....	Pure.
1683	D. Godfrey .....	Salem .....	Pure.
2008	O. C. Boston .....	South Bend .....	Pure.
2024	R. P. Milton .....	South Bend .....	Pure.

## SUMMARY.

Articles Examined.	Number found to be of good quality.	Number adulterated or varying from legal standard.	Total number of articles examined.	Percentage of adulteration.
Baking Powder .....	14	25	39	81.1
Beeswax, yellow .....	21	45	66	68.1
Beeswax, white .....	2	68	70	97.1
Bottled beverages .....	6	10	16	62.5
Butter .....	10	0	10	0.0
Canned fruits .....	13	0	13	0.0
Canned vegetables .....	30	19	55	34.5
Cheese .....	4	0	4	0.0
Condensed milk .....	7	1	8	12.5
Cream of tartar .....	18	5	21	23.8
Drugs, miscellaneous .....	46	0	55	16.3
Drugs, precipitated sulphur .....	6	20	26	100.0
Honey .....	25	5	30	16.7
Lard .....	6	1	7	14.3
Lemon extract .....	4	4	8	50.0
Lime juice .....	3	1	4	25.0
Maple syrup and sugar .....	20	0	26	23.0
Meat products, sausage, pressed meats, etc., fresh .....	16	34	50	68.0
Meat products, sausage, pressed meats, etc., canned .....	7	7	14	50.0
Milk .....	65	26	91	28.5
Miscellaneous flavoring extracts .....	3	20	23	86.9
Molasses .....	10	11	21	52.3
Molasses, sorghum .....	10	6	16	37.5
Olive oil .....	7	2	9	22.2
Oysters, etc., shrimp, canned .....	1	4	5	80.0
Spices .....	110	19	129	14.7
Table syrup .....	3	0	3	0.0
Tomato catsup .....	0	2	2	100.0
Vanilla extract .....	2	3	5	80.0
Vinegar, cider .....	11	25	36	61.1
Vinegar, grain .....	0	5	5	100.0
Miscellaneous food products .....	22	1	23	4.3
Totals .....	500	389	889	43.7

CHART SHOWING GEOGRAPHICAL DISTRIBUTION OF DEATHS FROM CERTAIN  
COMMUNICABLE DISEASES FOR MAY, 1906.

NORTHERN SANITARY SECTION.

Total population .....	887,832
Total deaths .....	897
Death rate per 1,000 .....	11.9
Consumption, rate per 100,000 .....	138.2
Typhoid, rate per 100,000 .....	11.9
Diphtheria, rate per 100,000 .....	3.9
Scarlet fever, rate per 100,000 .....	1.3
Diarrheal diseases, rate per 100,000 .....	21.2



CENTRAL SANITARY SECTION.

Total population .....	1,087,620
Total deaths .....	1,110
Death rate per 1,000 .....	12.0
Consumption, rate per 100,000 .....	143.2
Typhoid, rate per 100,000 .....	16.2
Diphtheria, rate per 100,000 .....	3.2
Scarlet fever, rate per 100,000 .....	.0
Diarrheal diseases, rate per 100,000 .....	10.8

SOUTHERN SANITARY SECTION.

Total population .....	673,097
Total deaths .....	658
Death rate per 1,000 .....	11.5
Consumption, rate per 100,000 .....	143.7
Typhoid, rate per 100,000 .....	28.0
Diphtheria, rate per 100,000 .....	3.5
Scarlet fever, rate per 100,000 .....	5.2
Diarrheal diseases, rate per 100,000 .....	21.0

TABLE No. 1. Deaths in Indiana by Counties During the Month of May, 1906.

STATE AND COUNTIES.	Population Estimated According to U. S. Census Bureau.	Total Deaths Reported for May, 1906.		IMPORTANT AGES.										DEATHS FROM IMPORTANT CAUSES.																					
				Annual Death Rate per 1,000 Population.		Under 1 Year.			1 to 4, inclusive.			5 to 9, inclusive.			10 to 14, inclusive.			15 to 19, inclusive.			65 Years and over		Pulmonary Consumption.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Measles.	Whooping-Cough	Pneumonia.	Diarrheal Diseases, under 5.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicemia.	Cancer.	Violence.
		Stillbirths.	Livebirths.																																
State of Indiana.	2,648,549	2,665	11.9	174	346	139	44	53	93	767	318	58	40	8	...	4	6	35	213	38	40	14	6	128	152	...	172								
Northern Co's.	887,832	897	11.0	53	124	52	14	22	25	287	104	21	9	3	...	1	3	8	78	16	16	2	2	34	61	...	44								
Adams.	23,052	14	7.1	2	1	1	1	1	1	3	2	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Alien.	81,502	101	14.6	6	18	3	1	1	1	28	15	2	2	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Benton.	13,611	7	6.0	1	1	1	1	1	1	3	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Blackford.	19,914	15	8.8	3	3	2	1	1	1	13	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Carroll.	19,953	30	17.7	3	3	2	1	1	1	14	6	6	6	6	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Cass.	35,902	34	11.1	1	1	1	1	1	1	13	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Dekalb.	26,272	22	9.8	1	1	1	1	1	1	16	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Elkhart.	47,892	63	15.6	3	3	2	1	1	1	27	5	5	5	5	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Fulton.	17,736	20	13.3	1	1	1	1	1	1	19	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Grant.	63,973	71	13.0	5	5	2	1	1	1	9	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Howard.	29,531	29	11.5	4	4	2	1	1	1	10	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Huntington.	29,404	36	14.4	4	4	2	1	1	1	11	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Jasper.	15,535	4	3.6	1	1	1	1	1	1	7	4	4	4	4	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Jay.	28,154	36	15.0	7	7	2	1	1	1	8	5	5	5	5	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Kosciusko.	29,295	22	8.8	1	1	1	1	1	1	1	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Lagrange.	15,284	14	10.8	1	1	1	1	1	1	8	5	5	5	5	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Lake.	43,434	46	12.4	2	2	1	1	1	1	10	5	5	5	5	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
LaPorte.	39,982	48	14.1	2	2	1	1	1	1	9	6	6	6	6	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Marshall.	25,839	17	7.8	1	1	1	1	1	1	10	3	3	3	3	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Miami.	29,352	26	10.4	1	1	1	1	1	1	11	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Newton.	11,106	5	5.3	1	1	1	1	1	1	12	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Noble.	23,603	21	10.4	4	4	2	1	1	1	13	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Porter.	19,624	16	9.6	1	1	1	1	1	1	14	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Pulaski.	16,153	5	3.8	1	1	1	1	1	1	15	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Starke.	11,668	7	7.0	1	1	1	1	1	1	16	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Steuben.	15,515	12	9.1	2	2	1	1	1	1	17	2	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
St. Joseph.	65,451	96	17.3	5	17	6	1	1	1	18	9	9	9	9	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Wabash.	28,679	19	7.8	3	3	2	1	1	1	19	7	7	7	7	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Wells.	24,223	20	9.7	2	2	1	1	1	1	20	7	7	7	7	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
White.	20,525	18	10.3	2	2	1	1	1	1	21	6	6	6	6	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Whitley.	17,328	23	15.6	3	3	2	1	1	1	22	4	4	4	4	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Central Co's.	1,087,620	1,110	12.0	67	145	47	17	18	47	314	132	22	16	3	...	3	18	95	10	18	7	2	69	57	...	96									
Bartholomew.	24,885	27	12.8	3	2	2	1	1	2	8	2	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Boone.	26,321	33	14.7	1	6	2	2	1	1	13	4	2	2	2	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Brown.	9,727	10	12.1	1	1	1	1	1	1	14	5	5	5	5	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Clay.	35,765	29	9.5	1	3	1	1	1	1	15	2	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Clinton.	28,535	25	10.3	2	2	1	1	1	1	16	3	3	3	3	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Decatur.	19,614	21	12.6	1	1	1	1	1	1	17	3	3	3	3	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Delaware.	57,421	47	9.8	3	3	2	1	1	1	18	2	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Fayette.	13,611	11	9.3	1	1	1	1	1	1	19	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Fountain.	22,201	19	10.0	2	4	3	1	1	1	20	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Franklin.	16,388	17	12.2	3	3	2	1	1	1	21	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Hamilton.	31,430	24	9.0	3	4	1	1	1	1	22	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Hancock.	19,755	17	10.1	3	1	1	1	1	1	23	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Hendricks.	21,292	25	13.8	2	3	1	1	1	1	24	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Henry.	20,488	19	10.9	1	1	1	1	1	1	25	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Madison.	34,063	67	9.4	1	1	1	1	1	1	26	1	1	1	1	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Marion.	21,655	313	16.9	21	43	4	5	4	5	27	6	5	5	5	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Monroe.	22,153	24	12.7	2	3	3	2	1	2																										

TABLE No. II. Deaths in Indiana by Cities During the Month of May, 1906.

# Mortality of Indiana for May, 1906.

POPULATION BY GEOGRAPH- ICAL SECTIONS AND AS URBAN AND RURAL.	Population Estimated by U. S. Method.		Total Deaths Reported for May, 1906.		Annual Death Rate per 1,000 Population.		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.		Consump- tion.		Other Forms Tu- berculosis.		Typhoid Fever.		Diphthe- ria.			
							Stillbirths.		Number.		Per Cent.		Number.		Per Cent.		Number.		Per Cent.		Number.		Death Rate.		Number.		Death Rate.		
State.	2,618,549	2,865	11.9	174	346	13.8	139	5.5	44	1.7	5.3	2.1	93	3.7	767	30.7	318	141.6	68	25.8	40	17.8	8	3.5	3.5	3.5	3.5	3.5	
Northern Co's.	887,832	897	11.9	52	123	14.6	52	6.1	14	1.6	22	2.6	25	2.9	287	31.0	104	138.2	21	27.9	9	11.9	3	3.3	3.3	3.3	3.3	3.3	
Central Co's.	1,057,520	1,110	12.0	67	135	13.9	47	4.5	17	1.6	18	1.7	47	4.5	314	30.0	132	143.2	15	23.8	15	16.2	3	3.3	3.3	3.3	3.3	3.3	
Southern Co's.	673,897	658	11.5	54	77	12.7	40	6.6	13	2.1	13	2.1	21	3.4	166	27.4	82	145.7	15	26.2	16	28.0	2	3.3	3.3	3.3	3.3	3.3	
All cities...	977,812	1,264	15.2	83	184	15.5	72	6.1	26	2.2	22	1.8	47	3.9	299	25.3	114	173.7	31	37.4	22	26.6	5	6.0	6.0	6.0	6.0	6.0	
Over 50,000...	260,046	355	16.1	26	52	15.3	11	3.3	8	2.4	5	1.5	23	7.0	70	21.2	39	176.9	6	27.2	5	40.8	1	7.4	7.4	7.4	7.4	7.4	
25,000 to 50,000...	153,349	237	17.5	9	52	22.8	16	7.0	3	1.8	2	1.8	7	2.0	55	24.1	26	192.5	8	59.2	1	1	1	1	1	1	1	1	1
10,000 to 25,000...	231,707	275	14.0	15	31	11.9	15	5.8	6	2.3	3	3.0	4	1.5	69	26.5	33	188.4	5	25.4	4	20.3	3	15.5	15.5	15.5	15.5	15.5	
5,000 to 10,000...	196,779	241	14.4	21	34	15.4	21	9.5	5	3.2	5	2.3	7	3.2	54	24.5	27	151.9	9	53.9	4	23.9	1	1	1	1	1	1	
Under 5,000...	129,881	156	14.1	12	15	10.4	9	6.2	4	1.4	2	1.4	6	4.1	51	35.4	14	127.1	3	27.2	2	36.3	2	12.7	3	2	2	2	
Country...	1,670,737	1,401	9.8	91	162	12.3	67	5.1	18	1.3	31	2.3	46	3.5	468	35.7	171	122.8	27	19.0	18	12.7	3	2	2	2	2	2	

## Deaths and Annual Death Rates per 100,000 Population from Important Causes.

POPULATION BY GEOGRAPH- ICAL SECTIONS AND AS URBAN AND RURAL.	Group.		Scarlet Fever.	Measles.	Whooping- Cough.	Pneu- monia	Diarrheal Diseases, Under 5 Yrs.	Cerebro- Spinal Meningitis.	Influenza.	Puerperal Septicemias.	Cancer.	Violence.	Small- pox.														
	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.	Number.														
State.	4	1.7	6	2.6	33	15.5	213	94.8	38	16.9	40	17.8	14	6.2	6	2.6	128	51.0	182	81.7	.....	.....	.....	.....	.....	.....	
Northern Co's.	1	1.3	3	3.9	8	10.6	78	103.6	16	21.2	16	21.2	2	2.6	2	2.6	34	45.1	61	81.0	.....	.....	.....	.....	.....	.....	
Central Co's.	3	3.2	3	3.2	18	19.5	95	103.0	10	10.3	18	19.0	7	7.5	2	2.1	69	74.8	57	61.8	.....	.....	.....	.....	.....	.....	
Southern Co's.	3	5.2	9	15.7	49	70.1	12	21.0	6	10.5	5	8.7	3	3.5	25	43.8	34	59.6	.....	.....	.....	.....	.....	.....			
All cities...	4	4.8	15	18.1	119	143.6	21	25.3	24	28.9	1	1.2	4	4.8	55	66.3	78	94.0	.....	.....	.....	.....	.....	.....			
Over 50,000...	.....	.....	7	31.7	33	149.7	3	13.6	7	31.7	1	4.5	19	86.2	18	81.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
25,000 to 50,000...	.....	.....	2	14.8	36	265.5	5	37.0	4	24.6	1	7.4	12	88.8	15	112.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
10,000 to 25,000...	.....	.....	1	5.0	2	10.1	19	96.7	4	20.3	6	30.5	1	5.6	9	45.8	23	117.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,000 to 10,000...	.....	.....	3	17.9	4	24.9	22	131.9	8	47.9	5	35.9	1	5.9	12	71.9	13	77.9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Under 5,000...	.....	.....	2	14.1	94	86.3	17	12.0	16	11.3	13	9.0	1	9.0	9.0	9.0	2	1.4	74	51.5	74	52.2	.....	.....	.....	.....	.....
Country...	4	2.8	2	1.4	20	14.1	94	86.3	17	12.0	16	11.3	13	9.1	2	1.4	74	51.5	74	52.2	.....	.....	.....	.....	.....	.....	

## Meteorological Summary for May, 1906. Furnished by the Central Office, Indiana Section, Climatological Service, U. S. Weather Bureau, Indianapolis, Ind., July, 2, 1906.

W. T. ELYTHE, SECTION DIRECTOR.

SECTIONS.	TEMPERATURE.						PRECIPITATION.			CONDITION OF SKY.			Wind.				
	Highest.			Lowest.			In Inches.			Number of Days.							
	Mean.	Departure from Normal.	Date.	Place.	Departure.	Date.	Average.	Departure from Normal.	Showfall Un-melted.	Days with 0.1 inch or more.	Clear.	Partly Cloudy.	Cloudy.				
Northern Section.....	62.2	+1.3	98	24	Logansport	26	10.	Auburn	....	2.41	-1.87	0	8	14	9	8	SW.
Central Section.....	63.4	+1.1	92	24	Crawfordsville	26	7	Mauzy	....	2.74	-1.13	0	8	13	10	8	SW.
Southern Section.....	65.6	+5.6	96	21	Madison	20	7	Butterville	....	1.77	-2.04	0	7	16	10	5	SW.
State.....	63.7	+0.9	98	24	Logansport	24	7	Mauzy	....	2.29	-1.76	0	8	14	10	7	SW.