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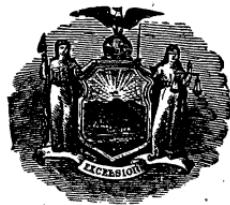
New York Agricultural Experiment Station.

GENEVA, N. Y.

INSPECTION OF FEEDING STUFFS.

W. H. JORDAN AND F. D. FULLER.

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BULLETIN No. 255.

INSPECTION OF FEEDING STUFFS.

W. H. JORDAN AND F. D. FULLER.

SUMMARY.

- (1) Prior to May 3d one hundred and four manufacturers licensed one hundred and fifty-four brands of feeding stuffs for the year 1904.
- (2) Two hundred and sixty-three samples of feeding stuffs, officially collected from Jan. 6, 1904, to May 6, 1904, have been analyzed.

INTRODUCTION.

Herewith is presented the work of the Station in the examination of concentrated feeding stuffs found in the markets of New York State, in 1904, in compliance with the provisions of the Agricultural Law, Chap. 338, Article 9.

The law under which the samples included in this bulletin were taken so defined the term "concentrated commercial feeding stuffs" that it practically covered all feeds *excepting the following*:—Hays and straws, and the *entire* grains of wheat, rye, barley, oats, maize (corn), buckwheat and broom corn, either whole or ground into meal; also bran and middlings from wheat, rye and buckwheat when sold as such unmixed with other materials. The above feeds may still be sold legally without the payment of a license fee.

AMENDMENT OF THE LAW.

The legislature of 1904 passed an act amending the law controlling the sale and analysis of concentrated commercial feeding stuffs, which was approved by the Governor on May 3d, 1904. This amendment transfers the administration of the feeding stuffs law to the Commissioner of Agriculture, the Experiment Station still being required to analyze the samples of feeding stuffs collected by said Commissioner. Certain materials were added to the specified list of feeds which are defined as "concentrated commercial feeding stuffs," as follows: bean meals, peanut meals, dried distillers' grains, dried beef refuse, meat and bone meals, clover meals, condimental stock and poultry foods, patented and proprietary, or trade-marked, stock and poultry foods.

The condimental stock and poultry foods were added to the list of feeding stuffs requiring legal supervision because it was felt that the interests of the agricultural public demand this. If these mixtures were offered to the public merely as medicines or condiments and no other claims were made for them they would not properly be classed among feeding stuffs. The fact is, how-

ever, in a large number of cases extraordinary and even startling claims are made as to the nutritive (food) value of these substances, and it is but just that these claims should be subject to the same examination given to other materials offered to the public as food for cattle. It is time for the public to be more fully defended, if possible, against what is now one of the most serious impositions practiced upon it.

The law has been further modified by repealing Section 127 which required that any person violating the provisions of the law be given thirty days after one notice in which to comply with said provisions. The actual effect of this requirement, under the interpretation placed upon Section 127 by the Attorney General, was to prevent prosecutions of offenders, a fact which caused the attitude of the Director of the Station to be misinterpreted by those ignorant of the situation.

FEEDING STUFFS LICENSED IN 1904.

Previous to May 3d, 1904, one hundred and four manufacturers or jobbers registered the required guarantees and paid the license fee on one hundred and fifty-four brands of feeding stuffs to be placed on sale in New York State in 1904.

The brands named in the following table (1), may be handled legally during the current year :

TABLE I.—MANUFACTURERS AND JOBBERS WHO, PRIOR TO MAY 3d, 1904, COMPILED WITH THE NEW YORK FEEDING STUFFS LAW FOR THE YEAR 1904, WITH A LIST OF BRANDS SO GUARANTEED AND THE GUARANTEES.

License number.	Manufacturer or jobber.		Name of feed.	Guarantees.	
	Name.	Address.		Protein.	Fat.
				<i>Per cent.</i>	<i>Per cent.</i>
421	Acme Milling Co.,	Olean, Jamaica, Chicago, Ill., “	Acme feed, Ground feed, American poultry food, Quaker dairy feed, Corn, oats and barley feed,	8.5 8.75 14.0	4.5 3.0 4.5
464	Adikes, J. & T., American Cereal Co., The,	“ “ “ “ “ “	Schumacher's stock food, “C” feed, Victor corn and oat feed, Vim oat feed, Prime cottonseed meal,	14.0 13.0 9.0 9.0	3.5 5.0 4.0 4.0
411	“ “ “ “ “ “	“ “ “ “ “ “	Maizeline, Hominy feed, Oil meal, O. P., Malt sprouts,	43.0 14.81 10.24 32-36	9.0 8.76 7.72 5-7
472	American Cotton Oil Co., The, American Hominy Co., “ “	New York, Indianapolis, Ind., “ “ “ “ “ “	Sucrene dairy feed, “ horse feed,	16.5	3.5
394	“ “ “ “ “ “	“ “ “ “ “ “	Blood meal,	13.5	5.0
438	American Linseed Co.,	“ “ “ “ “ “	Meat meal,	87.0	0.2
420	American Malting Co.,	“ “ “ “ “ “	Meat and bone,	50.0	10.0
453	American Milling Co.,	“ “ “ “ “ “	Poultry bone,	45.0	8.0
432	Armour Fertilizer Works, The,	Chicago, Ill., “ “ “ “ “ “	G.W.Bagley & Son's mixed feed, No. 100 fancy white corn bran,	25.0	5.0
	“ “ “ “ “ “	“ “ “ “ “ “	Malt sprouts,	16.0	6.0
	“ “ “ “ “ “	“ “ “ “ “ “	Blatchford's calf meal,	11.0	7.22
433	Bagley, G. A., Baringer, M. F.,	Peekskill, Philadelphia, Pa., Rochester, N.Y., Waukegan, Ill., “ “ “ “ “ “	“ sugar and flaxseed,	30.74 25.0	0.32 5.0
488	Bartholomay Brewery Co.,	“ “ “ “ “ “	Berg's 3 medal poultry meat,	28.25	11.25
413	Barwell, J. W.,	“ “ “ “ “ “	Biles' Fonrex (XXXX) distil-	50-55	13-15
451	“ “ “ “ “ “	“ “ “ “ “ “	lers' dried grains,	33.0	11.0
460	Berg Co., The,	“ “ “ “ “ “			
401	Biles, J. W., Co., The,	“ “ “ “ “ “			

TABLE I.—*Continued.*

License number.	Manufacturer or jobber.		Name of feed.	Guarantees.	
	Name.	Address.		Protein. Per ct.	Fat. Per ct.
401 449	Biles, J. W., Co., The, “ “ “	Cincinnati, O., “ “ “	Biles' ready ration, union grains, Biles' Rye (R) distillers' dried grains,	24.0 21.0	7.0 5.0
444 457	Blono Manufacturing Co., Bowker Fertilizer Co., “ “ “	New York, “ “ “	Blono feed, Bowker's beef scraps, “ animal meal, “ Owl" cottonseed meal, Royal mixed feed, Creamery feed, Poultry feed,	15.0 30.0	1.19 20.0
469 467 443	Brooks, F. W., & Co., Brooks Elevator Co., Buffalo Cereal Co., “ “ “	Memphis, Tenn., Minneapolis, Minn., Buffalo, “ “ “	Dairy feed, Horse feed, Honny feed, 3 X stock feed, Howard's honny meal,	30.0 43.0 16.6 20.0 17.0	5.0 9.0 5.48 5.0 5.0
459	Cassel, F. P., Chapin & Co., Clark & Mercer, Clements, A. L., & Co., Commercial Milling Co., Continental Cereal Co., Coonley, G. W., Crown & Williams, Curtiss Co., C. G., The, Cyphers Incubator Co., “ “ “	Lansdale, Pa., Buffalo, Baldwinsville, New York, Detroit, Mich., Peoria, Ill., Albany, Ossining, Buffalo, “ “ “	F. P. C. Chick Manna, Green Diamond cot'seed meal, Meal and shorts, C. C. cow oil meal, Dandy corn and oat chop feed, Continental gluten feed, Capitol C. & O. feed, C. & W. mixed feed, Malt sprouts, Cyphers laying food, forcing food,	14.01 43.0 12.05 32-38 10.81 35.0 9.04 10.0 25.0 15.26 18.17	4.75 9.0 4.15 5-8 6.02 12.5 3.75 4.0 1.0 5.5 7.11

389	Darling & Co., 465 Dewey Bros. Co., The, 473 Diamond Elevator & Milling Co., 494 Dixon & Warren, 462 Ellicottville Milling Co., 402 Empire Mills, 412 Everett & Treadwell,	Chicago, Ill., " " Blanchester, O., Minneapolis, Minn., Port Byron, Ellicottville, Olean, Kingston,	Beef scraps, " meal, Corn Protegran, " O. O., feed, Provender, Chop feed, Empire feed, C. O. & W. feed,	10-15 10-15 45-55 33.0 9.19 9.4 8.2 7.63 11.5 2.97 3.5
392	Finn G. M., Flint Mill Co., " " " " " "	Syracuse, Buffalo, " " " " " "	Ground beef and bone scraps, Green oval linseed meal, Flint gluten feed, Apex stock food, Green Diamond hominy feed,	40-45 32-36 5-7 28.5 16.0 4.7 8-9
409	" " " " " "	" " " " " "	Chicago gluten meal, Buffalo gluten feed, Germ oil meal, Fancy corn bran,	37.0 27.0 22.0 14.0
441	Glucose Sugar Refining Co., The, " " " " " " " "	Chicago, Ill., " " " " " " " "	Chautauqua chop feed, Excelsior C. & O. feed, Boss C. & O. feed, Friends' oat feed, Royal oat feed, Derby hominy feed,	8.09 4.16 9.0 4.2 9.0 4.0 8.0 7.6 11.0 8.0
491	Grandin, D. H., Great Western Cereal Co., The, " " " " " "	Jamestown, Chicago, Ill., " " " " " "	Meat meal, Beef scraps, Egg builder ration, Linseed meal, O. P., Corn and oat feed,	3.0 3.0 10.0 3.0 3.0
393	" " " " " "	" " " " " "	The H-O Co.'s dairy feed, " " poultry feed, " " horse feed,	10.43 18.0 17.0 12.0
495	Harding, G., I., " "	Binghamton, " "	Edw. Elsworth & Co.'s De-Fi corn and oat feed,	3.0
463	Hauenstein & Co., Hayt, S. T., H-O Company, The, " " " "	Buffalo, Corning, Buffalo, " " " "	10.0 25.0 20.0 35.65 7.62 4.0 4.5 5.5 4.5	
430				
471				
484				

TABLE I.—Continued.

License number.	Manufacturer or jobber.		Name of feed.	Guarantees.	
	Name.	Address.		Protein. Per ct.	Fat. Per ct.
474	Hodgman Milling Co., Hotton, Nicholas, Hubinger, J. C., Bros. Co., Hunter Bros. Milling Co., The,	Painted Post, Portville, Keokuk, Ia., St. Louis, Mo., “ “ “ “	Corn and oat chop feed, Common feed, K. K. K. gluten feed, Hominy feed, Cottonseed meal, Linseed oil meal, O. P., Monarch chop, Hygienic stock food,	9.69 8.38 27.0 11.02 43.0 34.0 8.09 11.56	3.88 4.85 3.0 7.7 9.0 6.5 4.16 3.62
475	Husted Milling and Elevator Co., Hygienic Food Co.,	Buffalo, “	Cream gluten meal, Pekin gluten feed, Geneva corn bran, Hawkeye gluten feed,	37.0 27.0 11.0 25.18	3.0 3.0 3.0 5.92
476	Illinois Sugar Refining Co., “ “ “ “	Chicago, Ill., “ “ “ “	Malt sprouts, “ S. K. ” oil meal, O. P., Pure oil meal, O. P., Kidder's feed, Champion feed, Blue Ribbon corn dist'r's grains,	23.8 ^t 35.94 36.7 11.0 9.92 33.0	1.34 5.04 7.83 8.05 4.01 11.0
477	Iowa Milling Co., Kam Malting Co., Kellogg, Spencer, Kelloggs & Miller, Kidder, F. L., & Co., Knickerbocker Milling & Grain Co., Krause, C. A., Grain Co.,	Buffalo, Amsterdam, Paris, Ill., Albany, Milwaukee, Wis., Buffalo,	Lackawanna special horse and cattle feed, Common feed, Dried molasses beet pulp, Dried beet pulp, Dandy dairy feed,	10.93	3.48
478	Lackawanna Mill & Elevator Co., Lapham & Parks, Larrove Milling Co., The, Lawrence, N., Co., The,	Glens Falls, New York, “ “ “ “	7.5 9.63 8.56 8.0	3.5 0.42 0.59 2.5	

398	Mann Bros. Co., The, Marcus, Julius,	Buffalo, New York,	Linseed oil meal, Manhattan gluten feed, Merchants' dairy feed,	6.05 10-12
424	" "	" "	Ajax flakes,	32-35 10.8-12.0
425	" "	" "	Evap. bone and meat meal,	32-35 10.8-12.0
426	McCoy & Best,	Peekskill, Toledo, O.,	Oil meal, O. P.,	41.4 30-36
440	Metzger Seed & Oil Co.,	Milwaukee, Wis.,	Climax grains,	5-7 34.0 11.0
396	Meurer, Deutsch & Sickert Co.,	New York,	Michigan gluten feed,	32.5-37.5 5.5-8.5
423	Michigan Starch Co., The,	Minneapolis, Minn.,	Ground linseed cake, O. P.,	
496	Midland Linseed Co.,		Queen gluten feed,	26.0 25.0 8.2 27.0
414	National Starch Co.,	Chicago, Ill.,	Malt sprouts,	3.0 2.0 3.37
436	Nester, S. K.	Geneva,	Niagara C. & O. feed,	
418	Niagara Mill & Elevator Co.,	Buffalo,	N. M. Co.'s hominy chop,	
428	Noblesville Milling Co.,	Noblesville, Ind.,	Globe gluten feed,	
481	N. Y. Glucose Co.,	New York,	Chop feed, Cottonseed meal,	8.58 43.0 10.0 13.0 8.75 9.0
403	Oliver, Geo.,	Olean, Portsmouth, Va.,	" feed, Monarch horse feed,	4.86 9.0 3.0 5.75
390	Oliver Refining Co.,	"	Corn and oat provender,	
388	" "	Albany,	Arrow corn and oat feed,	
405	Oneonta Milling Co.,	"	Syracuse, Geneva,	
429	" "	"	New York, Memphis, Tenn.,	
468	Page, J. D., & Co.,		Lebanon, Ill.,	
455	Parent Cereals Co., The,		Indianapolis, Ind.,	
490	Payne, W. H., & Son,		Decatur, Ill.,	
480	Petitt, Hugh, & Co.,		Stamford, Conn.,	
466	Pfeffer Milling Co.,		Buffalo,	
386	Piel Bros. Starch Co.,		New York,	
447	Pratt Cereal Oil Co.,			
487	Puritan Poultry Farms & Mfg. Co.,			
489	Rodebaugh, J. H.,			
431	Romaine, DeWitt,			

TABLE I.—*Concluded.*

License number.	Name.	Manufacturer or jobber.	Address.	Name of feed.	Guarantees.	
					Protein.	Fat.
475	Smith, A. V.,	Marcellus Falls,	Barley meal,	<i>Per ct.</i>		
479	Stanton, H. M.,	Schenectady,	Ground scraps,	14.8	3.4	
445	Staples, A. S.,	Rondout,	Arcade mixed feed,	50.0	9.0	
439	Streeter, L. L., & Sons,	Johnstown,	Common feed,	10.42	5.86	
417	Suffern, Hunt & Co.,	Decatur, Ill.,	Hominy feed,	8.78	5.23	
442	Swift's Lowell Fertilizer Co.,	Boston, Mass.,	Swift's Lowell bone & meat meal,	11.02	7.7	
400	Toledo Elevator Co., The, “	Toledo, O., “	Regular hominy, Star feed,	40-50	8-15	
434	Union Linseed Co.,	Troy,	“ Cow ” oil meal,	12.6	8.57	
410	U. S. Frumentum Co.,	Detroit, Mich.,	Frumentum hominy feed,	11.4	7.31	
452	Victor Mills,	Springville,	Golden chop,	22.09	6.32	
448	Wagar, C. W., & Co., “	Philadelphia, Pa., “	Cedar Rapids gluten feed, Imperial dairy feed, “ Mapes ” balanced ration for poultry,	10.31	7.98	
454	Wallace, L. R.,	Middletown,	8.74	26.57	3.33	
406	Waller, A., & Co.,	Henderson, Ky.,	4.0	12.59	3.19	
419	Warner Sugar Refining Co.,	Chicago, Ill.,	Blue grass mixed feed,	28.0	3.5	
477	Weidler, S. W., Co., The,	Cincinnati, O.,	Warner's gluten feed, Weidler's germ food,	14.54	6.45	

The list of licensed brands may be classified as follows:

Proprietary or mixed feed,	70 brands.	Corn bran,	3 brands.
Meat and bone meal.	16 "	Molasses feed,	3 "
Hominy feed or chop,	13 "	Gluten meal,	2 "
Gluten feed,	12 "	Sugar beet refuse,	2 "
Linseed oil meal,	11 "	Cottonseed feed,	1 "
Distillers' grains,	9 "	Germ oil meal,	1 "
Cottonseed meal,	6 "		
Malt sprouts,	5 "	Total,	154 brands.

ANALYSES OF SAMPLES COLLECTED BY INSPECTOR.

The following table (II) shows the partial analyses of samples of feeding stuffs collected by an inspector in different parts of the State from Jan. 6, to May 6, 1904. In the feeding stuffs law, special emphasis is laid upon two important features—*first*, that the composition of certain feeds shall be correctly guaranteed, as to their content of protein and fat; *second*, that adulteration of any feed is a violation of the law unless the true composition or adulteration is plainly indicated upon the package containing the same or in which it is offered for sale.

Therefore in the following tabulation, the percentage of protein and fat guaranteed are given for comparison with the amount actually present, and in most of the samples the percentage of crude fiber was determined, which served in estimating to what extent some of the materials were adulterated. The table also includes the retail price per ton.

Owing to an excess of moisture in some of the samples collected, which were evidently kept under conditions favorable to the growth of mold, they deteriorated to such an extent that their analysis would represent the goods as being much inferior to what they were when they were sampled in the markets.

Therefore, eight samples of corn and oat products, four of beef scraps, three of meat meal, two of bran and middlings, and one sample each of corn meal, meal and shorts, molasses feed and stock food were not included in the inspection.

TABLE II.—ANALYSES OF FEEDING

Collection No.	Name and address of manufacturer or jobber.	Sampled at
1179	American Cotton Oil Co., New York,	Fort Edward, E. L. Potter,
1257	Biggs, R. W., & Co., Memphis, Tenn.,	Buffalo, Husted Milling & Elevator Co.,
1095	Bridges, H. E., & Co., Memphis, Tenn.,	New York, W. S. Travis,
1155	Brodé, F. W., & Co., Memphis, Tenn.,	Troy, J. D. Westfall & Sons,
1213	Chapin & Co., St. Louis, Mo.,	Watertown, A. H. Herrick & Son.,
1237	Falls, J. G., & Co., Memphis, Tenn.,	Amsterdam, W. N. Carpenter Co.,
1328	Falls, J. G., & Co., Memphis, Tenn.,	Binghamton, G. Q. Moon & Co.,
1220	Hayley & Hoskins, Memphis, Tenn.,	Fulton, Gilbert & Nichols Co.,
1102	Humphreys, Godwin & Co., Memp., Tenn.,	Pleasantville, Washburne Supply Co.,
1307	Humphreys, Godwin & Co., Memp., Tenn.	Oneonta, Oneonta Milling Co.,
1232	Hunter Bros. Milling Co., St. Louis, Mo.,	Geneva, J. T. Cook,
1274	" " " "	Jamestown, F. A. Smiley & Co.,
1258	Independent Cotton Oil Co., Memp., Tenn.,	Buffalo, Buffalo Cereal Co.,
1216	Nat. Cottonseed Products Co., Memp., Tenn.,	Oswego, H. M. Quigg,
1226	Pettit, Hugh, & Co., Memphis, Tenn.,	Syracuse, H. Frier,
1078	Robinson, G. B., New York,	New York, Clark & Allen,
1204	Sledge & Wells Co., Memphis, Tenn.,	Utica, Ogdent & Clark,
1080	American Linseed Co., New York,	Jamaica, J. & T. Adikes,
1312	" " " "	Oneonta, Morris Bros.,
1114	Chapin & Co., Buffalo,	Dobbs Ferry, Lawrence & Co.,
1275	" " "	Jamestown, F. A. Smiley & Co.,
1333	" " "	Owego, Truman & Jones,
1341	" " "	Spencer, M. D. Fisher & Sons,
1190	Flint Mill Co., Milwaukee, Wis.,	Malone, O. S. Lawrence,
1230	" " " "	Rome, G. Oster & Sons,
1279	" " " "	Salamanca, H. Neff,
1127	Hauenstein & Co., Buffalo,	Ossining, J. Chadeayne & Sons,
1267	" " " "	Brocton, V. Mathews,
1103	Hunter Bros. Milling Co., St. Louis, Mo.,	Pleasantville, Washburne Supply Co.,
1243	Kellogg, Spencer, Buffalo,	LeRoy, J. Maloney & Son,
1147	Kelloggs & Miller, Amsterdam,	Albany, Barber & Bennett,
1207	Mann Bros. Co., The, Buffalo,	Boonville, A. H. Barber & Son,
1271	" " " "	Jamestown, D. H. Grandin,
1100	Metzger Seed & Oil Co., Toledo, O.,	White Plains, E. G. Faile,

STUFFS COLLECTED BY INSPECTOR.

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.			
		Found.	Guaranteed.	Found.	Guaranteed.					
		Per ct.	Per ct.	Per ct.	Per ct.					
OIL CAKE MEALS.										
<i>Cottonseed meal.</i>										
I179	Cottonseed meal, prime,	42.2	43.0	9.9	9.0		\$30.00			
I257	* " " 41.0-46.0	21.8	5.0	7.0-9.0	22.7	25.50				
I095	* " "	43.8	43.0	10.0	9.0-10.0	30.00				
I155	" " Owl,	45.9	43.0	9.5	9.0	29.00				
I213	" " Green diamond,	45.5	43.0	9.5	9.0	32.00				
I237	* " " Southern beauty,	43.2	43.0	10.2	9.0	30.00				
I328	* " " " "	39.8	43.0	11.4	9.0	29.00				
I220	* " " prime,	40.3	43.0	10.0	9.0	27.00				
I102	* " " Dixie,	44.1	43.0	9.0	9.0	30.00				
I307	* " " "	43.6	43.0	8.0	9.0	28.00				
I232	" " "	43.1	43.0	8.8	9.0	28.00				
I274	" " prime,	38.7	43.0	6.9	9.0	28.00				
I258	* " " "	41.7	43.0	9.7	9.0	26.00				
I216	* " " Indian, prime,	46.2	40.0-45.0	10.8	8.5-10.0	28.00				
I226	" " Horseshoe,	41.2	43.0-47.0	10.2	9.0-11.0	29.00				
I078	" " prime,	39.1	43.0	10.2	9.0	28.00				
I204	* " " Star, prime,	43.5	43.0	8.2	9.0-10.0	28.00				
<i>Linseed meal, old process.</i>										
I080	Linseed oil meal, O. P.,	31.3	32.0-36.0	7.4	5.0-7.0	30.00				
I312	" " "	34.6	32.0-36.0	7.1	5.0-7.0	27.00				
III14	* " " Export,	30.0	36.0	7.6	7.0	26.00				
I275	* " " "	29.8	36.0	7.4	7.0	28.00				
I333	* " " "	29.9	36.0	8.0	7.0	28.00				
I341	* " " "	28.3	36.0	6.8	7.0	30.00				
I190	" " Green ov.,	33.0	36.0	8.3	7.0	30.00				
I230	" " "	29.5	32.0-36.0	7.3	5.0-7.0	27.00				
I279	" " "	36.5	32.0-36.0	7.8	5.0-7.0	26.00				
I127	" " "	36.4	38.32	6.7	7.0I	30.00				
I267	" " "	35.1	35.65	6.6	7.62	29.00				
I103	" " "	32.3	34.0	7.2	6.5	36.00				
I243	" " "	32.6	35.94	13.5	5.04	30.00				
I147	" " "	34.9	36.7	9.2	7.83	28.00				
I207	" " "	34.7	35.15	8.6	6.05	27.00				
I271	" " "	34.9	35.15	7.9	6.05	29.00				
I100	" " "	32.2	32.0-36.0	8.2	5.0-7.0	40.00				

Collection No.	Name and address of manufacturer or jobber.	Sampled at
1270	Metzger Seed & Oil Co., Toledo, O.,	Jamestown, Hayward & Co.,
1128	Union Linseed Co., Troy,	Poughkeepsie, J. J. McCann,
1077	Clements, A. L., & Co., New York,	New York, Clark & Allen,
1228	Midland Linseed Co., Minneapolis, Minn.,	Batavia, C. H. & H. N. Douglass,
1118	Milwaukee Linseed Oil Wks., Mil'kee, Wis.,	Ossining, Crow & Williams,
1143	Biles, The J. W., Co., Cincinnati, O.,	Albany, J. A. Reynolds,
1242	" " " "	Rochester, E. C. Campbell,
1101	Chapin & Co., Buffalo,	Pleasantville, Washburne Supply Co.,
1159	Krause, C. A., Grain Co., Milwaukee, Wis.,	Troy, J. D. Westfall & Sons,
1266	Biles, The J. W., Co., Cincinnati, O.,	Buffalo, Henry & Missent,
1221	Chapin & Co., Buffalo,	Fulton, Gilbert Nichols Co.,
1276	" " "	Falconer, Falconer Milling Co.,
1212	American Spirits Mfg. Co., Peoria, Ill.	Carthage, Jones & Simmons,
1282	" " " "	Olean, Olean Mills,
1197	Page, J. D., & Co., Syracuse,	Ogdensburg, W. C. Wilcox,
1104	Merchants Distilling Co., Terre Haute, Ind.,	Pleasantville, Washburne Supply Co.,
1294	" " " " "	Buffalo, Chapin & Co.,
1134	Mueller, E. P., Milwaukee, Wis.,	Poughkeepsie, Reynolds Elevator Co.,
1138	Mueller, E. P., Milwaukee, Wis.,	Poughkeepsie, Ambler Bros.,
1262	Heinhold, J. G., Buffalo,	Lancaster, P. Mook,
1265	Kam Malting Co., "	Buffalo, Henry & Missent,
1139	Mueller, E. P., Milwaukee, Wis.,	Poughkeepsie, Ambler Bros.,
1357	Nester, S. K., Geneva,	Geneva, S. K. Nester,
1160	Oneonta Milling Co., Oneonta,	Troy, A. VanValkenburg,
1306	" " " Chicago, Ill.,	Oneonta, Oneonta Milling Co.
1200	Rang, H., & Sons, Chicago, Ill.,	Utica, McLaughlin Bros.,
1130	Pope, Chas., Glucose Co., Chicago, Ill.,	Poughkeepsie, Reynolds Elevator Co.,
1199	Flint Mill Co., Milwaukee, Wis.,	Ogdensburg, V. G. Morey,
1152	Glucose Sugar Refining Co., Chicago, Ill.,	Albany, Knickerbocker Mill & Grain Co.,
1334	Glucose Sugar Refining Co., Chicago, Ill.,	Owego, C. R. Dean,
1142	Illinois " " " "	Albany, J. A. Reynolds,
1218	National Starch Co.,	Oswego, National Starch Co.,
1094	New York Glucose Co., New York,	New York, W. S. Travis,
1304	" " " "	Oneonta, Oneonta Milling Co.,
1263	Piel Bros. Starch Co., Indianapolis, Ind.,	Lancaster, P. Mook,

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaranteed.	Found.	Guaranteed.		
		Per ct.	Per ct.	Per ct.	Per ct.		
I270	Linseed oil meal, O. P.,	32.6	32.0-36.0	7.2	5.0-7.0		\$25.00
I128	" " Cow,	32.9	22.09	8.1	6.32		35.00
I077	" cake, ground, O. P.,	28.9	32.0-37.5	7.1	5.5-8.5		25.00
I228	" " "	28.9	32.5-37.5	8.2	5.5-8.5		30.00
III8	* " " " "	32.7	34.0-38.0	9.2	5.0-8.0		30.00
	DISTILLERY AND BREWERY BY-PRODUCTS.						
	Distillers' grains.						
I143	Distillers' dried grains, XXXX,	35.4	33.0	I3.5	II.0	I2.0	26.00
I242	" " " "	33.5	33.0	I4.1	II.0		26.00
I101	* " " " Ajax,	30.9	34.02	I4.1	I2.03	I4.0	25.00
I159	" " " Blue ribbon,	31.6	33.0	I2.8	II.0		26.00
I266	" " " rye (R),	19.1	21.0	7.3	5.0	I3.7	20.00
I221	Ajax flakes,	31.1	34.0	I3.1	I2.0		25.00
I276	"	32.4	34.0	I1.4	I2.0		25.00
I212	Gluten feed, Manhattan,	34.8	34.0	I1.4	I2.0		26.50
I282	" " "	33.3	34.0	I0.2	I2.0		28.00
I197	Dairy feed, Empire State,	31.6	36.22	I3.4	II.76		28.00
I104	" " Merchants',	32.6	34.0	I4.3	I2.0	I2.3	25.00
I294	" " "	31.8	34.0	I4.3	I2.0		
	Brewers' grains.						
II34	* Brewers' dried grains,	25.2		6.1		I4.2	21.00
II38	" " "	28.7		7.2		I5.0	22.00
	Malt sprouts.						
I262	Malt sprouts,	24.2		I.7			I7.00
I265	" "	25.9	23.81	I.4	I.34		I5.50
II39	* " "	25.0		I.5			18.00
I357	" "	31.2	25.0	2.7	2.0		15.00
I160	* " "	24.3		I.7			18.00
I306	* " "	24.4		I.5			20.00
I200	* " "	26.4		I.5			18.00
	CORN BY-PRODUCTS.						
	Gluten meal.						
II30	Gluten meal, Cream,	38.8	34.12	2.0	3.2		32.00
	Gluten feed.						
I199	Gluten feed, Flint,	22.7	28.5	3.2	3.0		26.00
I152	" " Buffalo,	23.4	28.0	3.6	3.0		26.00
I334	" " "	24.2	28.0	2.9	3.0		24.50
I142	" " Pekin,	26.6	28.0	3.5	3.0		26.00
I218	" " Queen,	24.3	27.5	2.4	2.5		24.00
I094	" " Globe,	25.3	27.0	2.5	3.38		27.00
I304	" " "	25.9	27.0	3.7	3.38		26.50
I263	" " Piel Bros.,	27.0	27.6	I.9	2.6		24.00

Collection No.	Name and address of manufacturer or jobber.	Sampled at
1136	Warner Sugar Refining Co., Chicago, Ill.,	Poughkeepsie, Reynolds Elevator Co.,
1327	Warner Sugar Refining Co., Chicago, Ill.,	Binghamton, G. Q. Moon & Co.,
1151	Glucose Sugar Refining Co., Chicago, Ill.,	Albany, Knickerbocker Mill & Grain Co.,
1215	Pratt Cereal Oil Co., Decatur, Ill.,	Oswego, H. M. Quigg,
1256	" " " "	Buffalo, Husted Mill & Elev. Co.
1097	American Hominy Co., Indianapolis, Ind.,	Yonkers, M. A. Austin,
1123	Buffalo Cereal Co., Buffalo,	Peekskill, C. S. Horton & Sons,
1259	" " "	Buffalo, Buffalo Cereal Co.,
1342	" " "	Ithaca, W. J. Davis,
1126	Chapin & Co.,	Ossining, J. Chadeayne & Sons,
1281	" " "	Olean, Empire Mills,
1309	Hunter Bros. Milling Co., St. Louis, Mo.,	Oneonta, Oneonta Milling Co.,
1356	Patent Cereals Co., Geneva,	Geneva, Patent Cereals Co.,
1082	Payne, W. H., & Son, New York,	New York, W. H. Payne & Son,
1109	Suffern, Hunt & Co., Decatur, Ill.,	White Plains, Cowen & Co.,
1319	" " " "	Oneonta, Ford & Rowe,
1137	Toledo Elevator Co., The, Toledo, O.,	Poughkeepsie, Ambler Bros.,
1314	" " " "	Oneonta, Morris Bros.,
1290	U. S. Frumentum Co., Detroit, Mich.,	Springville, Victor Mills,
1264	Acme Milling Co., Indianapolis, Ind.,	Lancaster, P. Mook,
1269	Bernet, Craft & Kauffman Mill Co., St. Louis, Mo.,	Fredonia, O. M. & J. R. Hall,
1311	Blish Milling Co., Seymour, Ind.,	Oneonta, Morris Bros.,
1211	Brooks Elevator Co., Minneapolis, Minn.,	Lowville, Louis Bush,
1231	Chapin & Co., Buffalo,	Canastota, F. T. Benjamin,
1268	Commercial Milling Co., Detroit, Mich.,	Brocton, C. P. Lawson,
1353	Empire State Mills, Syracuse,	Tully, W. A. Dewey,
1320	Fertig, H. G., & Co., Minneapolis, Minn.,	Sidney, A. J. Ives,
1210	Flint Mill Co., Milwaukee, Wis.,	Lowville, Louis Bush,
1293	" " " "	Buffalo, Flint Mill Co.,
1131	Gardner Mill, The, Hastings, Minn.,	Poughkeepsie, Reynolds Elevator Co.,
1325	Hunter Bros. Milling Co., St. Louis, Mo.,	Norwich, R. D. Eaton Grain & Feed Co.,
1229	Imperial Milling Co., Duluth, Minn.,	Rome, G. Oster & Son,
1313	" " " "	Oneonta, Morris Bros.,
1202	Kehlor Bros., St. Louis, Mo.,	Utica, McLoughlin Bros.,
1187	Lawrenceburg Roller Mills Co., Lawrenceburg, Ind.,	Whitehall, The Witherbee Cash Store,
1222	Meyer, J. F., & Son, Springfield, Mo.,	Phoenix, A. C. Parker,
1316	Moore, R. P., Milling Co., Princeton, Ind.,	Oneonta, Morris Bros.,
1315	Morris Bros., Oneonta,	Oneonta, Morris Bros.,
1196	Ogdensburg Roller Mills, Ogdensburg,	Ogdensburg, Ogd'bg Roller Mills,

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaranteed.	Found.	Guaranteed.		
1136	Gluten feed, Warner's,	Per ct. 23.8	Per ct. 28.0	Per ct. 2.5	Per ct. 3.5	Per ct.	\$27.00
1327	Gluten feed, Warner's, <i>Germ oil meal.</i>	24.5		3.5			25.50
1151	Germ oil meal,	23.2	25.0	9.9	10.5		26.00
	<i>Germaline.</i>						
1215	Germaline,	13.2	12.9	1.1	1.29	4.4	23.00
1256	" <i>Hominy feed.</i>	11.3	12.9	1.4	1.29	4.9	25.00
1097	Hominy feed,	10.9	10.24	9.4	7.72	4.2	25.00
1123	" meal, Howard,	9.6	10.5	7.9	8.5	3.8	25.00
1259	" feed,	9.7	10.5	5.4	8.5	3.9	20.00
1342	" "	9.7	10.5	8.6	8.5	5.3	24.00
1126	" " Green diamond,	10.4	11.0	8.2	8.0-9.0	5.1	24.00
1281	" " "	9.2	11.0	6.6	8.0-9.0	7.1	23.00
1309	" "	9.4	11.02	8.4	7.7	5.8	23.50
1356	" "	10.1	11.0	8.4	8.0	4.4	21.00
1082	" chop,	10.1	11.49	7.3	8.0	3.6	24.00
1109	" "	9.5	11.02	6.7	7.7	5.2	28.00
1319	" feed,	9.2	11.02	7.4	7.7	4.5	23.00
1137	" "	9.3	12.6	6.4	8.57	7.7	24.00
1314	" "	9.6	12.6	5.1	8.57	6.4	23.00
1290	" " Frumentum, WHEAT BY-PRODUCTS. <i>Bran and middlings.</i>	10.1	10.31	7.2	7.98	3.3	22.00
1264	Acme feed,	15.8		4.7		8.5	24.00
1269	Mixed "	16.3		4.5		8.4	23.50
1311	" "	15.4		4.6		8.2	25.00
1211	" " Royal,	16.3		4.8		8.7	23.50
1231	" " Erie,	15.6		4.5		8.2	24.00
1268	" " winter wheat,	15.3		4.0		8.2	24.00
1353	" "	15.4		4.9		7.7	25.00
1320	" " Monogram,	17.3		5.2		7.6	25.00
1210	" " Vermont,	17.3		5.1		7.8	24.50
1293	" " "	16.9		5.1		7.8	
1131	" " Croesus,	16.3		4.5		10.2	25.00
1325	" " Sunshine,	17.6		4.7		7.8	25.00
1229	" " Boston,	16.8		5.0		8.9	24.00
1313	" " "	16.8		5.2		8.9	24.00
1202	" " "	15.6		4.5		8.6	23.00
1187	" " Snowflake,	15.1		4.6		7.4	27.00
1222	" " Model,	16.3		4.5		8.5	23.00
1316	" " King,	18.3		4.6		8.6	25.00
1315	" " Delaware,	15.1		4.5		7.9	25.00
1196	" " "	15.0		4.3		5.9	24.00

Collection No.	Name and address of manufacturer or jobber.	Sampled at
1195	Rex Milling Co., Kansas City, Mo.,	Malone, Ladd & Smallman,
1209	Russell, Henry, Albany,	Boonville, A. H. Barber & Son,
1310	Russell-Miller Mill Co., Minneapolis, Minn.,	Oneonta, Oneonta Milling Co.,
1321	Sheffield Milling Co., The, Faribault, Minn.,	Sidney, Sidney Flour & Feed Co.,
1191	Sparks Milling Co., Alton, Ill.,	Malone, G. D. Northridge,
1203	" "	Utica, G. W. Head Co.,
1208	Stott, David, Detroit, Mich.,	Boonville, A. H. Barber & Son,
1236	" "	Amsterdam, W. N. Carpenter Co.,
1201	Thornton & Chester Milling Co., Buffalo,	Utica, McLoughlin Bros.,
1189	Waller, A. & Co., Henderson, Ky.,	Malone, O. S. Lawrence,
1326	Washburn-Crosby Co., Minneapolis, Minn.,	Norwich, H. O. Hale,
1223	Webster Mill Co., Webster, S. D.,	Phoenix, A. C. Parker,
1217	American Cereal Co., Chicago, Ill.,	Oswego, H. W. Barnes & Son,
1288	" "	Ellicottville, Ellicottville Milling Co.,
1198	Stock, F. W., & Sons, Hillsdale, Mich.,	Ogdensburg, W. C. Wilcox,
1219	Gage, W. G., & Co., Fulton,	Fulton, W. G. Gage & Co.,
1157	American Cereal Co., Chicago, Ill.,	Troy, J. D. Westfall & Sons,
1181	" " " "	Fort Edward, J. G. Kinne,
1177	Great Western Cereal Co., The, Chicago, Ill.,	Fort Edward, E. L. Potter,
1183	" " " "	Glens Falls, G. Roberts,
1340	" " " "	Painted Post, Hodgman Milling Co.,
1169	Barwell, J. W., Waukegan, Ill.,	Hoosick Falls, J. J. Deming & Co.,
1305	" " " "	Oneonta, Oneonta Milling Co.,
1178	" " " "	Fort Edward, E. L. Potter,
1277	" " " "	Salamanca, H. Neff,
1354	Biles, J. W., Co., Cincinnati, O.,	Cazenovia, G. H. Atwell & Son,
1149	Knickerbocker Milling & Grain Co., Albany	Albany, Knickerbocker Milling & Grain Co.,
1185	Glens Falls Co., Glens Falls,	Glens Falls, Glens Falls Co.,
1253	Hotton, Nicholas, Portville,	Portville, N. Hotton,
1176	Lapham & Parks, Glens Falls,	Glens Falls, Lapham & Parks,
1174	Ashton, E. B., Saratoga Springs,	Saratoga Springs, E. B. Ashton,
1148	Barber & Bennett, Albany,	Albany, Barber & Bennett,
1081	Bowne Bros., Flushing,	Flushing, Bowne Bros.,
1088	Bowne, S. W., Brooklyn,	Brooklyn, S. W. Bowne,
1343	Fall Creek Milling Co., Ithaca,	Ithaca, W. J. Davis,
1076	Morgan, Thomas, Long Island City,	Long Island City, Thos. Morgan,
1278	Neff, Henry, Salamanca,	Salamanca, H. Neff,
1083	Payne, W. H., & Son, New York,	New York, W. H. Payne & Son,
1089	Shaw & Truesdell Co., Brooklyn,	Brooklyn, Shaw & Truesdell Co.,
1105	Washburne Supply Co., Pleasantville,	Pleasantville, Washburne Supply Co.,
1170	Tierney & Dalton, Mechanicville,	Mechanicville, Tierney & Dalton,

Col- lec- tion No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guar- anteed.	Found.	Guar- anteed		
		Per ct.	Per ct.	Per ct.	Per ct.		
1195	Mixed feed,	16.5		4.9		8.0	\$25.00
1209	" "	17.3		5.2		7.1	24.50
1310	" " Occident,	16.5		5.4		7.8	25.50
1321	" " Gold Mine,	18.5		3.8		7.6	25.00
1194	" " Tri-Me,	18.3		4.5		8.0	24.00
1203	" "	16.3		4.5		8.4	23.00
1208	" " Stott's Honest,	14.5		4.7		8.0	24.50
1236	" " " winter wheat,	15.9		4.5		7.8	24.00
1201	" "	16.5		5.1		9.3	23.00
1189	" " Blue Grass,	10.5	12.59	1.9	3.19	18.0	24.00
1326	" " Superior,	16.8		4.7		8.9	24.00
1223	" "	16.7		5.2		8.1	22.50
1217	Wheat feed, Buckeye,	15.6	17.75	4.3	4.7	7.5	23.00
1288	" " "	15.0	17.75	4.2	4.7	7.6	24.00
1198	" " Monarch ground,	14.6		4.6		7.4	25.00
OATS AND THEIR BY-PRODUCTS.							
1219	* Oats, ground,	7.9		3.2		20.5	31.50
1157	* Oat feed, X,	7.2	6.3	3.0	2.38	24.0	14.00
1181	" " Vim,	8.1	6.3	2.7	2.38	23.6	13.00
1177	* " " Cream,	5.1	6.97	1.5	2.83	25.6	15.00
1183	" " Royal,	5.7	7.53	2.1	2.85	27.1	17.00
1340	" " "	5.1	7.6	2.0	2.8	29.7	15.00
COMPOUNDED FEEDS. <i>Proprietary and otherwise.</i>							
1169	Blatchford's calf meal,	22.7	26.0	4.5	5.0		70.00
1305	" " "	22.1	26.0	4.3	5.0		70.00
1178	" sugar and flaxseed,	26.1	28.25	10.2	11.25		70.00
1277	" " "	27.1	28.25	10.9	11.25		60.00
1354	Biles' ready ration,	24.6	24.0	6.9	7.0	9.1	26.00
1149	Champion feed,	9.9	9.92	2.8	4.01	3.7	22.00
1185	* Common feed,	8.5		2.9		7.6	24.00
1285	" "	8.9	8.38	2.5	4.85	12.7	22.00
1176	" "	8.1	7.5	2.1	3.25	8.4	23.00
1174	Corn and light oats, ground,	9.6		3.4		5.8	23.00
1148	Corn and oats, ground,	8.5		1.2		9.9	22.00
1081	" " "	9.0		4.3		4.4	26.00
1088	" " "	7.8		3.8		7.5	21.80
1343	" " "	12.4		4.0		3.4	27.00
1076	" " "	8.3		4.0		4.4	22.00
1278	" " "	10.3		3.7		7.5	25.00
1083	" " "	9.1	10.05	6.3	6.21	10.1	
1089	" " "	8.6		3.5		5.7	22.20
1105	" " "	9.6		2.7		5.9	31.00
1170	Corn, oats and rye, ground,	10.5		2.2		7.7	30.00

Collection No.	Name and address of manufacturer or jobber.	Sampled at
1166	Buffalo Cereal Co.,	Hoosick Falls, Brown & Brownell,
1337	Chase-Hibbard Milling Co., Elmira,	Elmira, Chase-Hibbard Milling Co.,
1346	Dayton Milling Co., Towanda,	Ithaca, J. B. Thayer,
1261	Allen, C. E., Niagara Falls,	Niagara Falls, C. E. Allen,
1286	Ellicottville Milling Co., Ellicottville,	Ellicottville, Ellicottville Milling Co.,
1338	Hayt, S. T., Corning,	Corning, S. T. Hayt,
1339	Hodgman Milling Co., Painted Post,	Painted Post, Hodgman Milling Co.,
1121	Husted Milling & Elevator Co., Buffalo,	Peekskill, E. McCord & Son,
1233	" " " "	Geneva, C. C. Davidson,
1150	Knickerbocker Milling & Grain Co., Albany,	Albany, Knickerbocker Milling & Grain Co.,
1284	Oliver, Geo., Olean,	Olean, Geo. Oliver,
1182	Roberts, Geo., Glens Falls,	Glens Falls, Geo. Roberts,
1289	Victor Mills, Springville,	Springville, Victor Mills,
1153	Albany City Mills, Albany,	Albany, Albany City Mills,
1086	American Cereal Co., Chicago, Ill.,	New York, H. Ingersoll,
1299	" " " "	Medina, S. P. Blood & Co.,
1238	Buffalo Cereal Co., Buffalo,	Amsterdam, Hill & Watson,
1317	" " " "	Oneonta, Morris Bros.,
1192	Elsworth & Co., "	Malone, G. D. Northridge,
1084	Great Western Cereal Co, Chicago, Ill.,	New York, Demerest & Carr,
1085	" " " "	" " "
1171	" " " "	Ballston Spa., W. S. Wheeler's Son,
1191	Illinois Cereal Co., Lockport, Ill.,	Malone, G. D. Northridge,
1125	Niagara Mill & Elevator Co., Buffalo,	Ossining, J. Chadeayne & Sons,
1227	" " " "	Batavia, C. H. & H. N. Douglass,
1300	Niagara Mill & Elevator Co., Buffalo,	Albion, Woods & Sprague,
1186	Oneonta Milling Co., Oneonta,	Sandy Hill, H. S. & J. S. Shippy,
1303	" " " "	Oneonta, Oneonta Milling Co.,
1336	Peck, T. R., & Son, Horseheads,	Horseheads, T. R. Peck & Son,
1234	Dixon & Warren, Port Byron,	Auburn, A. W. Holley,
1145	Oneonta Milling Co., Oneonta,	Albany, J. A. Reynolds,
1302	" " " "	Oneonta, Oneonta Milling Co.,
1132	Buffalo Cereal Co., Buffalo,	Poughkeepsie, Reynolds Elev. Co.,
1168	Buffalo Cereal Co., Buffalo,	Hoosick Falls, Brown & Brownell,
1096	American Cereal Co., Chicago, Ill.,	Yonkers, J. J. Wiffler,
1344	" " " "	Ithaca, Holman Bros.,
1173	" Milling Co., Peoria, Ill.,	Ballston Spa., W. S. Wheeler's Son,
1322	American Milling Co., Peoria, Ill.,	Norwich, Eaton Grain & Feed Co.,

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaranteed	Found.	Guaranteed		
1166	Corn and oat chop,	Per ct. 8.4	Per ct. 7.5	Per ct. 4.3	Per ct. 3.5	Per ct. 13.0	\$21.50
1337	" " " No. 2,	9.1		3.6		11.3	21.00
1346	" " " No. 2,	6.8		2.4		9.5	26.00
1261	* Chop feed, Niagara,	10.1	10.42	3.0	4.83	10.3	21.00
1286	" "	7.5	8.2	1.8	4.4	11.6	23.00
1338	" " corn and oats,	9.4	10.43	3.4	4.0	9.5	26.00
1339	" " "	10.2	9.69	3.4	3.88	6.2	25.00
1121	" " Monarch,	7.1	8.09	4.0	4.16	13.8	24.00
1233	" "	11.6	8.09	4.5	4.16	12.6	22.00
1150	" " corn and oats,	9.8		2.5		5.2	20.00
1284	" "	7.8	8.13	1.8	4.59	11.8	26.00
1182	" " and corn meal,	8.4		3.4		5.5	24.00
1289	" Golden,	8.8	9.17	3.0	5.84	6.1	20.00
1153	Corn and oat feed, Capitol,	6.3	9.04	2.6	3.75	18.4	21.50
1086	" " Victor,	8.1	9.0	4.1	4.0	11.2	24.00
1299	" "	8.9	9.0	4.6	4.0	11.7	23.00
1238	" " XXX,	9.6	9.5	4.6	4.5	10.4	25.00
1317	" "	9.7	9.5	4.5	4.5	14.0	26.00
1192	" " De-Fi,	9.4	8.3	2.5	3.0	15.8	20.00
1084	" " Boss,	7.3	8.27	2.4	3.64	15.4	
1085	" " Excelsior,	9.4	8.21	4.4	4.58	13.0	
1171	" "	9.6	9.0	6.2	4.2	10.3	24.00
1191	* " " Anchor,	9.1	9.5	2.4	4.0	14.1	22.00
1125	" " Niagara,	8.3	8.2	3.5	3.37	6.0	25.00
1227	" "	6.2	8.2	2.9	3.37	16.8	20.00
1300	" " "	7.0	8.2	3.0	3.37	15.6	24.00
1186	" " Arrow,	8.8	9.0	3.5	3.75	4.2	26.00
1303	" "	8.7	9.0	2.5	3.75	3.3	22.50
1336	" "	7.9		1.1		9.7	23.00
1234	" " provender,	7.7		2.7		13.3	28.00
1145	" " " choice,	7.3	8.75	2.3	3.5	11.4	20.50
1302	" " "	8.4	8.75	1.6	3.5	18.3	21.50
1132	Creamery feed,	19.8	20.0	5.4	5.0	12.1	28.00
1168	" "	17.6	20.0	5.1	5.0	12.2	27.00
1096	Dairy feed, Quaker,	14.7	14.0	4.7	3.5	17.1	28.00
1344	" " "	13.6	14.0	4.3	3.5	18.9	25.00
1173	" " Sucrene,	14.4	16.5	4.1	3.5	12.9	25.00
1322	" " "	15.5	16.5	2.5	3.5	11.4	24.00

Collection No.	Name and address of manufacturer or jobber.	Sampled at
1167	Buffalo Cereal Co., Buffalo,	Hoosick Falls, Brown & Bronnell,
1193	Great Western Cereal Co., Chicago, Ill.,	Malone, G. D. Northridge,
1113	H-O Co., The, Buffalo,	Dobbs Ferry, Lawrence & Co.,
1235	Empire Mills, Olean,	Auburn, J. T. Mollard,
1280	" " "	Olean, Empire Mills,
1079	Adikes, J. & T., Jamaica,	Jamaica, J. & T. Adikes,
1098	Brett, J. H., Mt. Vernon,	Mt. Vernon, J. H. Brett,
1090	Brooklyn Elev. & Mill. Co., Brooklyn,	Brooklyn, Brooklyn Elev. & Mill Co.,
1154	Close Bros., Schenectady,	Schenectady, Close Bros.,
1091	Fulton Grain & Milling Co., Brooklyn,	Brooklyn, Fulton Grain & Milling Co.,
1115	Lawrence, N., Co., Dobbs Ferry,	Dobbs Ferry, N. Lawrence Co.,
1092	McCord, H. D., & Son, New York,	New York, H. D. McCord & Son,
1158	Paine Bros. Co., Milwaukee, Wis.,	Troy, J. D. Westfall & Sons,
1093	Travis, W. S., New York,	New York, W. S. Travis,
1172	American Milling Co., Peoria, Ill.,	Ballston Spa., W. S. Wheeler's Son,
1323	American Milling Co., Peoria, Ill.	Norwich, Eaton Grain & Feed Co.,
1107	Buffalo Cereal Co., Buffalo,	White Plains, R. Young & Bros. Co.,
1087	H-O Co., The, Buffalo,	New York, T. P. Huffman & Co.,
1335	H-O Co., The, Buffalo,	Owego, C. R. Dean,
1146	Oneonta Milling Co., Oneonta,	Albany, J. A. Reynolds,
1291	Lackawanna Mill & Elevator Co., Buffalo,	Buffalo, Lackawanna Mill & Elev. Co.,
1119	Bagley, G. A. Peekskill,	Peekskill, G. A. Bagley,
1116	Crow & Williams, Ossining,	Ossining, Crow & Williams,
1308	Oneonta Milling Co., Oneonta,	Oneonta, Oneonta Milling Co.,
1359	Staples, A. S., Rondout,	Rondout, A. S. Staples,
1135	Mueller, E. P., Milwaukee, Wis.,	Poughkeepsie, Reynolds Elevator Co.,
1175	Mueller, E. P., Milwaukee, Wis.,	Saratoga Springs, D. Gibbs & Son,
1324	Mueller, E. P., Milwaukee, Wis.,	Norwich, Eaton Grain & Feed Co.,
1225	Rankin, M. G., Co., Milwaukee, Wis.,	Syracuse, H. Frier,
1140	Toledo Elevator Co., The, Toledo, O.,	Poughkeepsie, Reynolds Elevator Co.,
1332	Toledo Elevator Co., The, Toledo, O.,	Binghamton, Baker Bros.,
1108	American Cereal Co., Chicago, Ill.,	White Plains, R. Young & Bros. Co.,
1345	American Cereal Co., Chicago, Ill.,	Ithaca, J. B. Thayer,
1112	Flint Mill Co., Milwaukee, Wis.,	Dobbs Ferry, Lawrence & Co.,
1292	" " " "	Buffalo, Flint Mill Co.,

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaranteed.	Found.	Guaranteed.		
		Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
1167	Dairy feed,	12.8	14.0	3.6	4.0	14.2	\$24.00
1193	* Dairy feed, Great Western,	8.1	12.25	2.2	3.2	19.9	17.00
1113	" " H-O,	18.1	18.0	4.3	4.5	13.8	26.00
1235	Empire feed,	7.4	7.63	2.3	2.97	7.5	24.00
1280	" "	7.6	7.63	1.7	2.97	9.6	23.00
1079	Ground feed,	9.2	8.75	2.7	3.0	7.9	20.00
1098	" "	11.7		4.6		5.6	28.00
1090	" "	9.3		4.0		5.3	28.00
1154	" "	9.7		3.0		5.8	22.00
1091	" "	12.8		3.2		12.5	20.00
1115	" "	6.8		2.9		15.5	20.00
1092	" "	7.9		3.5		10.4	
1158	" " Puritan,	7.3	8.5	2.6	3.25	15.3	20.50
1093	" "	12.9		3.2		7.4	24.00
1172	Horse feed, Sucrene,	14.8	13.5	2.8	4.5	10.6	27.00
1323	" " "	15.0	13.5	2.3	4.5	10.9	26.00
1107	" "	12.3	12.0	4.9	4.5	10.5	29.00
1087	" " H-O,	11.5	12.0	4.1	4.5	9.4	28.00
1335	" " "	11.1	12.0	4.0	4.5	11.7	28.00
1146	" " Monarch,	13.8	13.0	4.0	5.75	7.2	28.00
1291	Horse and cattle feed, Lackawanna Special,	7.4	10.93	2.6	3.43	12.4	21.00
1119	Mixed feed, G. W. Bagley & Son's,	16.0	16.0	5.4	6.0	6.7	26.00
1116	" " C. & W.,	10.3	10.0	2.9	4.5	7.5	24.00
1308	" " rye,	15.8	14.75	3.2	3.5	5.4	24.00
1359	" " Arcade,	7.4	10.42	4.7	5.86	14.3	26.00
1135	Molasses feed for horses,	17.1	21.81	3.4	2.73	11.9	21.00
1175	" " "	24.0	21.81	4.1	2.73	10.9	20.00
1324	" " "	22.4	21.81	3.7	2.73	10.0	24.00
1225	" " "	22.2	21.81	3.0	2.73	9.8	21.00
1140	Star feed,	8.3	11.4	6.2	7.31	10.0	24.00
1332	" "	9.7	11.4	5.8	7.31	8.0	24.00
1108	Stock food, Schumacker's,	11.6	13.0	5.4	5.0	12.4	29.00
1345	" " "	11.8	13.0	4.8	5.0	11.9	27.00
1112	" " Apex,	14.9	16.0	4.8	4.0	16.6	26.00
1292	" " "	14.1	16.0	4.7	4.0	16.4	

Collection No.	Name and address of manufacturer or jobber.	Sampled at
1124	Strong, Lefferts Co., The, New York,	Peekskill, G. F. Cooley,
1355	Unknown,	Geneva, C. C. Davison,
1156	Diamond Elev. & Mill. Co., Minn., Minn.,	Troy, J. D. Westfall & Sons,
1164	American Cereal Co., Chicago, Ill.,	Troy, Young & Halsted,
1106	Buffalo Cereal Co., Buffalo,	White Plains, R. Young & Bros. Co.,
1111	H-O Co., The, Buffalo,	Dobbs Ferry, Lawrence & Co.,
1244	" " "	Batavia, E. J. Salway,
1350	Cornell Incubator Mfg. Co., The, Ithaca,	Ithaca, The Cornell Incubator Mfg. Co.,
1252	Cyphers Incubator Co., Buffalo,	Buffalo, Cyphers Incubator Co.,
1331	Harding, Geo. L., Binghamton,	Binghamton, G. L. Harding,
1122	Puritan Poultry Farms & Mfg. Co., N. Y.,	Peekskill, E. McCord & Son,
1254	Cyphers Incubator Co., Buffalo,	Buffalo, Cyphers Incubator Co.,
1161	" " "	Troy, H. W. Gordinier,
1255	" " "	Buffalo, Cyphers Incubator Co.,
1253	" " "	" " " "
1110	H-O Co., The, Buffalo,	White Plains, Corven & Co.,
1133	Harding, Geo. L., Binghamton,	Poughkeepsie, Reynolds Elevator Co.,
1296	Armour & Co., Chicago, Ill.,	Lockport, J. T. Garrison,
1248	" " " "	Buffalo, Harvey Seed Co.,
1117	Berg Co., The, Philadelphia, Pa.,	Ossining, Crow & Williams,
1287	Barwell, J. W., Waukegan, Ill.,	Ellicottville, Ellicottville Milling Co.,
1348	Cornell Incubator Mfg. Co., The, Ithaca,	Ithaca, The Cornell Incubator Mfg. Co.,
1144	Harding, Geo. L., Binghamton,	Albany, J. A. Reynolds,
1329	" " "	Binghamton, Geo. L. Harding,
1129	Bowker Fertilizer Co., New York,	Poughkeepsie, J. J. McCann,
1301	" " " "	Albion, Woods & Sprague,
1246	Romaine, DeWitt, New York,	Buffalo, Harvey Seed Co.,
1295	Armour & Co., Chicago, Ill.,	Lockport, J. T. Garrison,
1349	Cornell Incubator Mfg. Co., The, Ithaca,	Ithaca, The Cornell Incubator Mfg. Co.,
1141	Darling & Co., Chicago, Ill.,	Hudson, J. H. Vosburgh,
1239	" " " "	Gloversville, M. D. Kasson,
1206	Finn, G. M., Syracuse,	Utica, M. T. Jones,
1163	Stanton, H. M., Schenectady,	Troy, Young & Halstead,
1247	Wuychet Fertilizer Co., Dayton, O.,	Buffalo, Harvey Seed Co.,
1298	Armour & Co., Chicago, Ill.,	Lockport, J. T. Garrison,
1251	Cudahy Packing Co., The, Kan. C., Kan.,	Buffalo, Cyphers Incubator Co.,
1249	Swift & Co., Chicago, Ill.,	Buffalo, Harvey Seed Co.,
1120	Pioneer Cereal Co., Akron, O.,	Peekskill, G. A. Bagley,
1352	Ryan Bros., Jamesville,	Jamesville, Ryan Bros.,
1351	Smith, A. V., Marcellus Falls,	Marcellus Falls, A. V. Smith,
1214	Alma Sugar Co., Alma, Mich.,	Watertown, A. H. Herrick & Son,

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaranteed.	Found.	Guaranteed.		
		Per ct.	Per ct.	Per ct.	Per ct.		
1124	*Stock food, Lenox,	7.3	9.88	3.8	3.27	12.2	\$22.00
1355	*Wheat bran and oat hulls,	8.9		2.5		25.8	16.00
1156	Yellow feed, "O. O."	11.5	10.51	5.6	5.75	6.6	24.00
	POULTRY FOODS.						
1164	Poultry food, American,	13.3	14.0	6.4	4.5	5.0	35.00
1106	" "	15.2	17.0	5.3	5.0	4.9	35.00
1111	" " H-O,	16.4	17.0	5.6	5.5	4.9	28.00
1244	" "	17.8	17.0	5.9	5.5	6.2	35.00
1350	*Chick food, Stan. Peep O'Day,	10.8	15.0	4.2	7.75		50.00
1252	" "	10.7	10.47	2.2	3.31	4.9	39.00
1331	* " " Unexcelled baby,	11.1	15.0	2.4	7.75		50.00
1122	" " Puritan,	12.4	12.5	6.7	7.0	5.3	60.00
1254	Forcing food,	16.2	18.17	4.0	7.11	5.5	39.00
1161	Laying "	15.5	15.26	4.2	5.5	5.2	40.00
1255	" "	15.7	15.26	1.8	5.5	5.3	
1253	Scratching food,	11.1	11.34	2.9	3.17	5.7	
1110	" " H-O,	10.6	12.0	3.1	3.0	2.8	40.00
1133	Egg builder ration, Harding's,	13.1		3.9			45.00
1296	Poultry bone, coarse,	22.9	24.0-26.0	1.0	5.0-6.0		45.00
1248	" " fine,	25.7	25.0	0.9			40.00
1117	" meat,	58.1		16.8			55.00
1287	+ " meats, Blatchford's,	29.9	33.0	7.1	10.0		60.00
1348	*Meat meal, Cornell,	36.6	55.0-65.0	17.1	10.0-15.0		45.00
1144	" " celebrated,	34.1	55.0-65.0	13.6	10.0-15.0		50.00
1329	" " "	35.6	55.0-65.0	14.1	10.0-15.0		45.00
1129	Animal meal,	34.1	30.0	10.0	5.0		43.00
1301	" "	40.4	30.0	9.0	5.0		50.00
1246	Boiled beef and bone,	45.6	45.0	17.6	15.0		40.00
1295	Meat and bone,	51.4	45.0	12.4	8.0		50.00
1349	*Beef scraps, Cornell standard,	34.1	42.0-50.0	22.1	30.0-35.0		50.00
1141	Beef scraps, pure, ground,	56.5	55.0-65.0	13.2	10.0-15.0		50.00
1239	" " " "	52.0	55.0-65.0	11.9	10.0-15.0		60.00
1206	" " "	41.6	42.64	19.1	19.12		50.00
1163	" "	40.6	50.0	25.6	9.0		40.00
1247	* " " "	58.8	50.0	12.6	9.0		40.00
1298	Blood meal,	83.4	87.0	0.2	0.2		70.00
1251	* " " "	82.8		0.3			70.00
1249	* " " "	83.8	87.0	0.5			40.00
	UNCLASSIFIED FEEDS.						
1120	Barley feed, Pioneer,	13.7	15.0	3.0	4.61	8.2	25.00
1352	" meal,	13.9		3.4		9.2	21.00
1351	" "	13.1	14.8	4.1	3.4	10.7	21.00
1214	Beet pulp, dried,	8.4		0.7		19.2	18.00

* Not licensed in this State for 1904, prior to May 3, 1904.

+ A condimental preparation.

The samples analyzed may be classified as follows:

TABLE III.—CLASSIFICATION OF SAMPLES ANALYZED.

Name of feed.	No. samples.	No. brands.
Cottonseed meal.....	17	13
Linseed oil meal.....	19	10
Linseed cake, ground	3	3
Distillers' grains.....	12	8
Brewers' grains	2	1
Malt sprouts.....	7	6
Gluten meal.....	1	1
Gluten feed	10	7
Germ oil meal.....	1	1
Germaline	2	1
Hominy feed or chop.....	14	10
Mixed feeds (bran and middlings)	35	30
Oats and their by-products	6	5
Compounded feeds, proprietary and otherwise.....	96	74
Poultry foods.....	34	29
Miscellaneous feeds.....	4	4
Total.....	263	203

BRANDS ESPECIALLY MENTIONED.

The brands mentioned in Table IV are named for special consideration either because they are not what their name would indicate or because they are compounded by the use in part of inferior materials, oat hulls being the undesirable ingredient in nearly all cases.

It is unquestionably true that oat hulls have slight value as food for cattle, and their introduction into a compounded feed lowers the quality of the feed and should proportionately lower its price.

TABLE IV.—BRANDS NAMED FOR SPECIAL CONSIDERATION.

Collection No	Name of feed.	Protein.	Fat.	Fiber.
		Per ct.	Per ct.	Per ct.
1257	Cottonseed meal,	21.8	5.0	22.7
1189	Mixed feed, Blue Grass,	10.5	1.9	18.0
1219	Oats, ground,	7.9	3.2	20.5
1157	Oat feed, X,	7.2	3.0	24.0
1181	" Vim,	8.1	2.7	23.6
1177	" Cream,	5.1	1.5	25.6
1183	" Royal,	5.7	2.1	27.1
1340	" "	5.1	2.0	29.7
1153	Corn and oat feed, Capitol	6.3	2.6	18.4
1086	" " Victor,	8.1	4.1	11.2
1299	" " "	8.9	4.6	11.7
1238	" " XXX,	9.6	4.6	10.4
1317	" " "	9.7	4.5	14.0
1192	" " De-Fi,	9.4	2.5	15.8
1084	" " Boss,	7.3	2.4	15.4
1085	" " Excelsior,	9.4	4.4	13.0
1171	" " "	9.6	6.2	10.3
1191	" " Anchor,	9.1	2.4	14.1
1227	" " Niagara,	6.2	2.9	16.8
1300	" " "	7.0	3.0	15.6
1234	Provender,	7.7	2.7	13.3
1145	" choice corn and oat,	7.3	2.3	11.4
1302	" " "	8.4	1.6	18.3
1115	Ground feed,	6.8	2.9	15.5
1158	" " Puritan,	7.3	2.6	15.3
1359	Mixed " Arcade,	7.4	4.7	14.3
1335	Wheat bran and oat hulls,	8.9	2.5	25.8
1193	Dairy feed, Great Western,	8.1	2.2	19.9

COMMENTS ON THE RESULTS OF INSPECTION.

A study of the figures showing the results of the inspection up to May 3 reveals the fact that the samples representing quite a large number of brands contained considerably less protein than called for by guarantees. In all, at least fifty-two samples showed a larger deficit than would be regarded as reasonable.

The deficit occurred as follows :

Cottonseed meal.....	5 samples.
Linseed meal	9 "
Distillers' dried grains.....	4 "
Gluten feed.....	4 "
Hominy feed.....	6 "
Compounded and proprietary feeds.....	18 "
Poultry foods	6 "

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One brand, licensed as cottonseed meal, sold by the Husted Milling and Elevator Co., of Buffalo, N. Y., and recorded as manufactured by R. W. Biggs & Co., of Memphis, Tenn., was found to contain only 21.8 per ct. of protein whereas the minimum guarantee is 41 per ct.

The material is evidently cottonseed feed, or cottonseed meal mixed with ground hulls. Such a feed is fraudulent in its character.